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THE CHEMIST AND DRUGGIST is supplied regularly to every member of the following Societies:—

Pharmaceutical Society of Ireland.
 South African Pharmaceutical Association.
 Pharmaceutical Society of Natal.
 Central Pharmaceutical Association of N.Z.
 Otago Pharmaceutical Association.
 Pharmaceutical Society of Queensland.
 Pharmaceutical Society of South Australia.
 Pharmaceutical Society of Western Australia.

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EXPORT TRADE.

THE CHEMIST AND DRUGGIST for March 14 is to be sent to every firm in the United Kingdom who export druggists' goods. This is in continuation of an extra circulation which we initiated many years ago, which has proved eminently successful, and is likely to be more so this year, on account of the flourishing state of the export trade in druggists' goods. This particular issue brings together those firms who act for large buyers abroad, and manufacturers and agents for, or dealers in, drugs, chemicals, perfumery, paints, varnishes, aerated-water plant, bottles, and druggists' sundries of all kinds. The circulation to merchant-shippers will be in addition to the regular issue of THE CHEMIST AND DRUGGIST to its subscribers throughout Europe, Asia, Africa, India, America, and Australasia. Advertisers who think of taking space in the issue should address the publisher at once.

Summary.

BARCELONA chemists are threatening to strike, because of the new medicine stamp law (p. 276).

ADVANCES in cod-liver oil and opium are the principal features in the drug-market (p. 294).

OUR Paris Correspondent has interviewed Dr. Viron, the new Secretary of the Society of Pharmacy there (p. 276).

AN important meeting has been held to protest against the proposed increase of dock charges in London (p. 293).

A FIRM of grocers at Market Harborough have had to pay 5*l.* and costs for selling a bottle of Fellows's Syrup (p. 283).

A CORK apothecary has been fined, under the Arsenic Act, on account of an illegal sale of white arsenic by his assistant (p. 285).

FOLLOWING upon Mr. John C. Umney's paper on "Mitcham Peppermint Oils" we comment upon some points which require attention (p. 290).

MR. JOHN C. BARCLAY read some useful notes to Birmingham assistants last week. They dealt with ext. pareira liq., colocynth, and ext. coloc. co. (p. 277).

THE production of alkali in the United States is increasing so well that there is a prospect that the makers will be able to export their product in a few years (p. 276).

THE Marylebone Magistrate, in face of a good deal of authoritative evidence, insists on regarding white wax as a drug, and holds that when it is asked for bleached bees-wax and nothing else must be sold (p. 283).

RÖNTGEN's rays are being used for strange purposes. By the light artificial diamonds are distinguished from the real things (p. 275). The tendency of opinion now is towards identifying the action of the rays with electrolysis.

WE illustrate the extension of Messrs. Evans, Sons & Co.'s premises at Wood Street, Liverpool, which has been made to cope with the development of business in galenicals (p. 293). Messrs. Reade Brothers' new premises at Wolverhampton are illustrated on the same page.

THE Colonial Secretary sends us a copy of a letter which he has received from a New Zealand correspondent regarding the import of English and foreign goods in the colonies, and in connection with this we publish the views of several prominent firms who have experience of colonial trade (p. 279).

THE Local Government Board's Report on the working of the Sale of Food and Drugs Acts in 1894 is given on p. 287. It appears that of 1,116 samples of drugs taken, 125 were reported against, proceedings were taken in 50 cases, and in 39 of these penalties were imposed, amounting in all to 43*l.* 10*s.* 1*d.*

THE Registrar-General's report, from which we extract the statistics of poisonings in 1894, shows that carbolic acid was responsible for more suicides than all the scheduled poisons put together, with the exception of opium and its derivatives. The diagram which we publish, showing the rapid rise of carbolic acid to the top of the statistics, is graphic evidence of the danger of leaving its sale so long unrestricted (p. 233).

THE Shops (Early-closing) Bill, introduced by Sir John Lubbock as the result of the deliberations of the Select Committee last year, was read a second time in the House of Commons on Wednesday, without opposition. As it stands, it would make it possible for two-thirds of the members of any trade in a given locality to enforce the closing of the shops of the trade in that locality at a given hour not earlier than 7 P.M. (p. 290).

A CURIOUS coincidence may be noted in our legal reports. On the same day last week a London chemist and a Leeds chemist were prosecuted by the police, under section 17 of the Pharmacy Act, for a similar offence—namely, selling strychnine in vermin-killer to persons not sufficiently known to them. In both cases the chemists knew the purchasers by sight, but both Magistrates held that this was not statutory knowledge, and fines were imposed (p. 283).



English News

The Editor is obliged to correspondents who send local newspapers containing items of interest to the trade. He will be further obliged if such paragraphs be marked in all cases.

Wounding a Chemist.

At Worcester Assizes on February 15 a charge of wounding Mr. Loverock, chemist and druggist, Stourbridge, was preferred against a shoemaker named James Rowbottom. He was also charged with being found on the premises of Mr. Loverock, and further with stealing a bicycle. The man was found on the premises by Mr. Loverock, whom he attacked with a chisel, causing injuries to the head and face. A sentence of twelve months' hard labour was passed.

The Sale of Laudanum.

An inquest was held at Ashton-under-Lyne on February 11, respecting the death of a woman named Louisa Fiddler. It appeared that she had taken some laudanum in order to induce sleep. She sent her son for a pennyworth of the drug, the whole of which she drank, and died soon afterwards. John Herbert Titmas, chemist, employed by the Thompson Drug Company, Ashton, said the label on the bottle produced was his employers'. Two drachms of laudanum were given for a penny, and this would prove fatal to anyone not accustomed to take it. The Foreman: Was the boy (aged seven years) old enough to be supplied? Mr. Titmas replied that the boy brought a note for the laudanum, and that would be sufficient. A juror asked if anyone was allowed to serve laudanum besides the qualified assistant, and the witness said no. A verdict that deceased took a fatal overdose of laudanum to induce sleep was returned.

An Anti-Godfrey Coroner.

On February 14, Mr. Thorney, Borough Corner of Hull, held an inquest touching the death of Violet Smith, thirteen months old, daughter of a warehouseman. The child was found dead in bed. Margaret Smith, the mother, stated that the child had been delicate since birth, and had suffered for about nine months from bronchitis. On the day before her death witness gave her a teaspoonful of Godfrey's Cordial and syrup of rhubarb. It was bought of Mr. Glover, Waterloo Street. The Coroner: Did the person who supplied you tell you it was poison? Witness: No, sir. Mr. Glover supplied me. Do you know Godfrey's Cordial contains poison?—No, sir. Or that it contains opium or laudanum?—No, sir. In reply to a jurymen witness said she had given the cordial to her other children while teething. Dr. Walton testified that the cause of death was bronchitis of both lungs, probably accentuated by Godfrey's Cordial. The Coroner: Would the effect of the cordial be to weaken the child's power of resistance?—Yes. The jury returned a verdict that deceased died from bronchitis accelerated by a dose of Godfrey's Cordial, administered as a medicine, and not with intent to kill. The Coroner advised Mrs. Smith never to use the cordial again. It killed children or made them so weak they never recovered their strength.

Stealing from Chemists.

The branch shop of Mr. J. G. Wallbridge, chemist and druggist, Duke Street, St. Helens, was broken into by thieves one night last week. An entrance was effected by forcing the back door, and a thorough search of the premises appears to have been made. The contents of the till, amounting to a few shillings, were taken, all the drawers were ransacked, and the desk forced with a pair of scissors.

Festivities.

The May & Baker C.C. sat down to an excellent supper on Saturday last (February 15) at the Castle Hotel, Battersea. The supper was followed by a smoking-concert. Mr. H. Garnham occupied the chair, and Mr. A. G. Andrews the

vice-chair. Some well-known West-end artists appeared on the programme. The proceedings were much enjoyed.

The annual gathering of Westminster College students took place at the Bridge House Hotel on St. Valentine's Day to celebrate the birthday of the founder of the College, Mr. G. S. V. Wills. A capital concert was given by the students, the character-songs being especially well rendered and enjoyed. In the course of the evening handsome presentations were made to the Principals, Mr. G. S. V. Wills and Mr. H. Wootton, B.Sc., and to the Secretary, Mr. E. Walden.

The Nottingham and Notts Chemists' Association enjoyed their annual dinner at the Masonic Hall, Nottingham, on February 13. Mr. T. Mason presided, and the company included, Mr. Alderman Gibson (Manchester), Mr. Councillor Fitzhugh, Messrs. S. Cook, Wilford, Gill, Bolton, Middleton, Beverley, R. Widdowson, W. Widdowson, Beilby, Deaville, Sergeant, Turton, Dudley, Hare, Wilson, Jackson, H. Wilford, Gascoyne, Vallance, Radford, and Eberlin (Hon. Sec.). Among the toasts were "The Pharmaceutical Society," proposed by the Chairman, and replied to by Mr. C. A. Bolton (local secretary). Mr. Alderman Gibson proposed "The Public Bodies of Nottingham," for which Mr. Fitzhugh responded as a member of the Town Council, and Mr. S. Cook as a member of the Board of Guardians. "Success to the Nottingham and Notts Chemists' Association" was given by Mr. T. Gascoyne, and responded to by Mr. J. Wilford (Treasurer) and Mr. A. Eberlin (Hon. Sec.). "The Visitors" was proposed by Mr. Gill, and responded to by Messrs. Deaville and Stevenson. "The Chairman" was proposed by Mr. Fitzhugh. The proceedings were enlivened with songs, recitations, &c., by Mr. Turner, Mr. Vallance, Mr. Beverley, Mr. A. W. Young, Mr. Winslow, and several members of the company. Mr. H. Woodhouse was accompanist.

Suffocated in a Chesterfield Chemical-works.

Joseph Gaunt, an employé in the chemical-works of Messrs. Tyson & Bradley, the well-known manufacturers of Chesterfield, met his death on Friday last under somewhat peculiar circumstances. He was engaged in cleaning a tank, when he was overcome by the fumes, and ere rescue could be effected was suffocated.

Carbolic Acid for Hop-bitters.

At Bolton on Monday morning Robert Fielding, a labourer, got up to go to work, and before leaving the house picked up what he thought was a bottle of hop-bitters and drank part of the contents. The liquid proved to be carbolic acid. Fielding then ran a quarter of a mile to the nearest doctor. He died in the surgery after acute suffering.

Fires.

Last Sunday a fire broke out at the shop of Mr. G. J. Howitt, chemist and druggist, Main Street, Carlton. Before the Nottingham Fire-brigade extinguished the blaze damage to the extent of 400*l.* had been done.

The same day considerable damage was done by fire to the shop and stock of Mr. Ernest Whitby, chemist, 118 Abbey Street, Accrington.

Soothing-syrup for Babies.

At an inquest regarding the death of an infant, 5 months old, at Boston on Monday, the mother stated that she had been in the habit of giving it half-a-teaspoonful of soothing-syrup night and morning ever since it was born. This syrup was bought from Mr. Walter Bullivant, chemist, West Street, who, in his evidence, stated that the mother had been in the habit of getting four-pennyworth of syrup per week for some time. The most active ingredient was morphine, of which there was $\frac{1}{8}$ gr. in 4 dr. The mixture had been sold for thirty years, and there had never been any complaint before. The inquiry was adjourned, as it did not appear from medical evidence that the syrup had anything to do with the death.

A Pair.

At the Wallasey Petty Sessions, on Tuesday, Thomas Cheadle, aged 14, an errand-boy to Mr. Samuel H. Tottle, chemist, Liscard, was found guilty of stealing a number of bottles of spirits and some marked coins. His father, Joseph Francis Cheadle, was found guilty of receiving the things. The boy was dealt with under the First Offenders Act, and bound over to be of good behaviour, and the father was sentenced to one day's imprisonment.



Irish News

The Editor is obliged to correspondents who send local newspapers containing items of interest to the trade. He will be further obliged if such paragraphs be marked in all cases.

Thoughtful Burglars.

Sentencing three prisoners, brought before him on a charge of burglary, the Recorder of Cork said the accused first broke into a malt-store, and, having looted that place, they tried their hand in a local chemist's shop, but only secured a few dozen seidlitz-powders, which, he supposed, they wanted to take as a medicinal antidote to the bad whisky they consumed.

Choose to be a Director.

The directors of Henry Williams & Co. (Limited), the grocer-druggists, Dublin, have allotted 500*l.* to themselves and the managing director in the shape of fees and remuneration, but have paid no dividend on the ordinary shares of the company, for the half-year ending December 31 last. For the previous half-year they paid 6 per cent. The business is stated to be on the increase.

Pharmaceutical Chemists' and Apothecaries' Assistants' Association of Ireland.

At a special general meeting of this Association, held in Dublin on February 14, the Hon. Secretary (Mr. Hardy, L.P.S.I.) said the members at present on the roll exceeded one hundred. The membership included apprentices, assistants, employers, and medical men from all parts of Ireland. A letter was received from the Registrar of the Pharmaceutical Society in reference to an application made recently by the Association for the use of a room in the Society's house in Lower Mount Street, in which to hold the fortnightly meetings. Mr. Ferrall stated that the Council regretted that at present they could only offer the Association a room capable of holding a limited number, but that the Society had in view the formation of a students' association, and that if the proposed accommodation was sufficient the applicants were welcome to it, subject to compliance with the requirements of the Society.

In a short discussion which followed much satisfaction was expressed at the kind offer of the Society, which it was resolved to accept; and a deputation, consisting of Messrs. Corcoran, Hardy, and O'Sullivan, was appointed to wait upon the Registrar, at a date and hour to be arranged hereafter, to discuss the matter with that gentleman, and to effect the necessary transfer of the property of the Association. The President (Mr. McAlister) said the formation of a students' union was the outcome of a desire on the part of the Council to supply a long-felt want which existed prior to the starting of this Association in August of last year. At present nearly every assistant in Dublin was connected with their Association, and the students' union, if started, would be in reality an association within an association. He thought they might safely count on the support of the majority of the employers in helping on the assistants in their work of literary progress.

A New Pharmacy

has been opened in Clones, co. Cavan, by Mr. John Beatty, L.P.S.I., lately manager of Bower's Medical Hall, Dublin.

Company Pharmacy

in Ireland has received a great bolstering-up by the recent decision, to the intense disgust of the Pharmaceutical Society's alumni generally, who can see neither law nor equity in it. Some ask, Is there no weapon left in the pharmacological armoury to cope with the monster? while others counsel patience, expressing the belief that the Council may be safely trusted to deal with the difficulty.



Scotch News

The Editor is obliged to correspondents who send local newspapers containing items of interest to the trade. He will be further obliged if such paragraphs be marked in all cases.

Poisoning Cases.

The cook of St. Andrew's Home for Girls, Joppa, near Edinburgh, is under arrest on a charge of attempting to poison five of the sisters of the institution with arsenic. The cook, a young woman of 20, states that she got a small parcel from a fellow-servant who left the institution in September last, who remarked that "that would do for the brutes." She did not know what was in the parcel.

On Monday afternoon Miss Emma Preston, a teacher of music at Bridge of Allan, took a dose out of a bottle, in the belief that it contained sal volatile. She had, however, lifted a bottle containing a solution of strychnine instead. As soon as she had drunk the liquid she detected her mistake and gave the alarm. Medical assistance was at once obtained, but treatment was unavailing, and she died a few hours afterwards.

Glasgow Chemists' Ball.

The members of the Glasgow and West of Scotland Pharmaceutical Association had their annual dance on the evening of Thursday, February 13, in the Windsor Hotel. The function passed off most successfully. About eighty couples took part, and for their entertainment the committee, of which Mr. A. McKellar was convener, had an excellent programme arranged. Mr. W. L. Currie received the guests. The dance-music was up to date, and was supplied by Herr Iff's celebrated Glasgow band. The dance-programme was artistically got up with a pretty view of Æsculapins holding forth to a disciple seated at his feet.

French News.

(From our Paris Correspondent.)

RÖNTGEN'S RAYS.—New applications of the *x* rays are announced almost daily. A chemist named M. Gascard and M. Abel Briquet, Professor of Physics at the Bonen College and editor of the *Photo. Journal*, believe they have found a means of applying the rays in order to detect imitation diamonds. By photographing the real and imitation stones side by side very different results are obtained. The imitation diamonds are found to be very opaque for the *x* rays, and the developed negatives only give faint pictures. On the other hand, much darker photographs are produced from the real stones.

THE FRENCH SYNDICAL ASSOCIATION OF PHARMACISTS' ASSISTANTS held a general meeting on Saturday night, February 15, at the Bar Persan, Boulevard Sebastopol, Paris. The reunion was better attended and more calm and business-like than has latterly been the case. M. Robert Jocelyn had consequently little need to make his presidential bell heard for order. The formal business was rapidly transacted, and then the President announced that a subscription of 300*f.* had been voted by the Municipality of Paris, and a delegation was appointed to call at the Hôtel de Ville to receive the sum. Two members were likewise named to attend a meeting with the object of obtaining reduced railway-fares for their fellow-members. Some difficulty was noticed in obtaining volunteers for these services, easily explained by the fact that as the assistants' holidays are so few and far between they hesitate to sacrifice their rare days of liberty. An address was adopted to be presented to the Government, thanking them for their action on behalf of syndicates in general, one member grimly

remarking it was as well to hurry about presenting it, as otherwise the Ministry might fall before it was received. Several contributions were reported from wholesale drug-firms of 100*l.*, 50*l.*, &c., and after a discussion on the finances of the Syndicate the meeting broke up about 1.30 A.M.

THE SECRETARY FOR 1896 OF THE PARIS SOCIETY OF PHARMACY is Dr. Viron, head pharmacist at the Salpêtrière Hospital, as announced in the *C. & D.* Our representative called on him last week, and found him in his office, situated in a small one-storey building in the rear part of the hospital. Through one open door could be seen a neat and well-kept laboratory, with red-tiled floor, where two assistants were busy, and another showed a glimpse of Dr. Viron's own private laboratory. He had evidently just quitted, it as he still wore the sensible holland blouse coat of which French servants are nowise ashamed. A pile of papers and pamphlets lay before him, and behind was one of those revolving book-cases which one sees in busy editorial offices for speedy access to works of reference. He is still a young man, and has the affable and unassuming manner of a thoroughly well-bred Frenchman. In reply to an enquiry, he said, "I understand your impression that the Salpêtrière is a female lunatic asylum. Charcot's researches on hysteria had such a world-wide reputation that the slip is pardonable. We have, as a matter of fact, some hundred female patients for mental diseases of this class, and even a score or so of men hysterics, for this is the speciality of the medical staff here" (the *C. & D.* man had been confirmed in his impression by the bronze statue of Philippe Pinel, the mental specialist, which stands directly in front of the entrance). "But do you know there are some 6,000 inhabitants here, and the immense majority are the indigent poor? The institution is supported by the Assistance Publique. Perhaps our premises do not give you the impression of a pharmacy for a town of such a population." Dr. Viron was busy preparing his summary of the February meeting of the Paris Society of Pharmacy for publication in the *Journal de Pharmacie*, and after a little further conversation our representative retired. The hospital covers an area as large as some of the Parisian parks (the Parc Monceau, for instance), and the quaint old Louis XIV. buildings were discharging a stream of women, for the bell was sounding for the mid-day meal.

Foreign and Colonial News.

A SACCHARIN-MANUFACTURER'S LAWSUIT.—A short time ago a German chemical-factory advertised in the local journal for a chemist qualified to establish and manage a saccharin-factory. The replies, he said, would be considered strictly confidential. This advertisement attracted the attention of Dr. Kolbe, the proprietor of one of the two German chemical-works who manufacture saccharin. Dr. Kolbe, in the belief that the advertisement had been inserted for the purpose of endeavouring surreptitiously to obtain the services of one of his staff, caused a public statement to this effect to be inserted in the press. The original advertiser thereupon brought a libel-suit against Dr. Kolbe, and asked 100,000*m.* damages. The case came before the Court recently, and the Judge has held that Dr. Kolbe's action was justifiable, and acquitted him.

A MARTYR TO DUTY.—A pharmacist at a little town in Calabria, in Southern Italy, recently received a summons to serve on the jury in the capital of the province during a fortnight. The man had no assistant, and as, according to the Italian law, the proprietor of a pharmacy is bound to keep his shop open during certain hours every day, and to see that either himself or qualified assistant is in charge, the chemist in question applied to his three fellow-pharmacists in the same town in succession asking them to keep an eye on his shop. All, however, refused to do so, and the chemist thereupon shut up his business, and went to fulfil his duties as a jurymen. When he returned he found that the provincial medical officer whose business it is periodically to inspect pharmacies had been trying to obtain entrance to his shop

during his absence, and, finding it closed, had lodged a complaint against him with the authorities. In spite of his excuse the chemist was brought into court and narrowly escaped being fined the full penalty of 100*l.* for neglecting to observe the pharmacy law.

THREATENED STRIKE OF CHEMISTS IN SPAIN.—The Barcelona chemists threaten to close their shops altogether as a protest against the new medicine-stamp law, which provides that all patent medicines must bear a Spanish stamp of a certain value. The agitation among the Barcelona pharmacists appears to have impressed the Spanish Government, for under some pretext the Cabinet Minister whose department includes the application of the pharmacy law went to Barcelona, and while there received a deputation of the local pharmacists to ask for the abolition of the Stamp Act. The Minister tried to compromise by promising that instead of requiring every single bottle to be stamped, chemists would be allowed the advantage of purchasing a stated value of stamps during the year, and apparently leave unstamped specialities sold after exceeding that supply. The chemists, however, were not by any means satisfied, and pointed out that their business already bore so many taxes that they could not stand any further imposts. The Spanish Government are now again considering the matter, but their financial needs are such that it is not likely a satisfactory compromise can be arrived at.

PRODUCTION OF SODA IN THE UNITED STATES.—The production of soda in the United States is increasing rapidly, and the output for the year 1895 was about 161,000 metric tons, counted as 58 per cent. ash. The Solvay works, of Syracuse, N.Y., are preparing to increase capacity by 50 per cent. through their new Detroit works. The Mathieson Alkali Company, at Saltville, Va., is also preparing to make a large output of ash and caustic during the coming year, and is now working the Castner electrolytic process with excellent results. The neighborhood of Detroit will shortly become a great, if not the greatest, alkali-producing centre in the United States. Besides the new Solvay works, already referred to, the Michigan Alkali-works at Wyandotte, Church & Co. at Trenton, and two other projected works, are all in the vicinity of Detroit. The Standard Oil Company is also proposing to operate alkali-works at Cleveland, O., and there are two or three other projected works in other parts of the country. Professor S. P. Sadler remarks, in the *Amer. Phar. Jour.*, "there is every prospect that, in a few years more, the United States will not only make all the alkali required for domestic consumption, but it will, before many years, export to other markets, as the cost is constantly being reduced by increasing production and by utilising waste products."

AN ADVERTISING DOCTOR IN TROUBLE.—One of the best-known advertising doctors in Germany, a qualified medical man called Volheding, of Düsseldorf, has come into conflict with the judicial authorities, who are prosecuting him for serious irregularities alleged to have been committed by him in his medical practice. It seems that the doctor has been established in Düsseldorf for about eight years, and makes it a practice to advertise "radical cures, &c., either by correspondence or by personal interview." During the eight years it is said that the doctor has treated over half a million patients, the greatest output of consultants on one day being 495. In order to cope with this colossal trade the doctor found it necessary to employ a number of corresponding-clerks to whom the letters from patients, very often of a most private and delicate nature, were turned over for reply in a wholesale manner. It is alleged that the correspondents, who were quite ignorant of medicine, were in the habit of replying to the letters without in any way consulting the doctor, and selected any medicine they fancied would be suitable. The doctor kept a considerable stock of remedies, and out of this supply the clerks used to send to the patients a bottle, for which 6*m.* was demanded; the honorarium for a "consultation" being 10*m.* If the patient was known to be well off the prices were higher. Such was Dr. Volheding's popularity that he had received over 500 testimonials, a selection of which he was in the habit of publishing in his advertisement. All the originals of these have been seized, as well as most of the correspondence, by the police.

The Winter Session.

CHEMISTS' ASSISTANTS' ASSOCIATION.

AT the meeting held at 103 Great Russell Street, W.C., on February 13, Mr. J. C. EVANS, Lecturer on Inorganic Chemistry at the Finsbury Technical Institute, gave an address on

THE CHEMICAL TRAINING OF PHARMACISTS.

After referring to the old connection between pharmacy and chemistry, and the outgrowth of the latter as a science from the art of pharmacy, Mr. Evans proceeded to speak upon scientific training. So far as chemistry is concerned, he said that the old teachers were inclined to regard chemistry as a deductive science, and there is a tendency among students to think that all sciences are deductive. Pure mathematics as the preliminary scientific training of a youth Mr. Evans greatly deprecated, as it fosters the notion that all sciences could be learnt without experiments, and the youth got to despise the latter accordingly. Such a notion, once instilled into a student's mind, is only removed with difficulty. Chemistry is a purely inductive science, and the lecturer emphasised the point that students should, to a great extent, be made to discover the science for themselves. They should be sent over the track which others had trodden. As far as possible, a student should be made to perform the very experiments by which chemical truths were discovered. Instead of being obliged to commit to memory a long list of atomic weights, he should be taught how to distinguish between elementary bodies and compounds; he should find out for himself their equivalents and atomic weights. Chemical training, Mr. Evans said, made a man careful, and cultivated neatness in work and that constant watchfulness which is very necessary to a pharmacist. He knew nothing more calculated to develop watchfulness than blowpipe-analysis, which required all the senses to be on the alert. Mr. Evans then proceeded to discuss examinations, deploring that they led men to study syllabuses instead of the science. He held that the man who studied his science independently of any syllabus was the man who would be first in the race, and who, moreover, gained an intimate knowledge of his subject. It followed that if, instead of relying upon examination alone, we could have education (*i.e.*, teaching) and examination combined, and estimate a student's value by the work he did in class and laboratory, we should get a truer criterion of his abilities. In concluding an address which was rendered doubly interesting by many racy anecdotes culled from his experiences as a teacher, Mr. Evans impressed upon his hearers the advantages of accurate note-taking.

A brief discussion, initiated by Mr. E. W. HILL (President), followed, and the thanks of the Association were accorded to Mr. Evans.

MIDLAND CHEMISTS' ASSISTANTS' ASSOCIATION.

AT the meeting held on Wednesday, February 12, there was a large attendance to hear the "Laboratory Notes," by Mr. JOHN BARCLAY, B.Sc. The President (Mr. T. C. Clarke) occupied the chair. The first of the notes was on

LIQUID EXTRACT OF PAREIRA.

In the present official method (solution of solid aqueous extract in spirit and water) there is considerable loss, and the author recommends that the root be exhausted with a mixture of water (3 parts) and methylated spirit (1 part), the resulting extract being dissolved in sufficient of the official menstruum (rectified spirit 1 part, water 3 parts) to make 16 fluid parts. An extract so prepared dissolves completely to form a liquid containing about 20 per cent. of total solid matter. The same result might be obtained by percolating and re-percolating the root with the official menstruum, but the use of methylated spirit as above is found to be more economical.

COLOCYNTH PULP.

The estimation of the percentage of ash in the powdered drug is useful in ascertaining its freedom from seeds. The

"Pharmacographia" gives the ash of pulp dried at 100° C. as 11 per cent., of seeds 2.7 per cent. Squire gives for the former 8.6 to 14 per cent., for the latter 2.2 to 4 per cent. The writer found that 212 lbs. of peeled apples ground under small edge-running stones just so long as to crush the pulp without breaking the seeds yielded 48 lbs. of pulp containing 12 per cent. of ash, and 164 lbs. of seeds containing 2.37 per cent. of ash. This method may be safely used for separating pulp from seeds. Eight samples of pulp obtained from various sources were incinerated, and the mean percentage of ash was 11.45, the highest being 12.4 and the lowest 10.1. For the whole apple the mean is 4.6 per cent. of ash.

COMPOUND EXTRACT OF COLOCYNTH,

prepared according to the official formula and dried at 100° C., contains about 59.6 per cent. of extract of aloes, 19.8 of scammony resin, 14.9 of dried curd soap, 4.5 of cardamoms, together with so much of the colocynth used as is soluble in proof spirit. It might, therefore, be expected that a properly prepared extract would contain an amount of water-soluble matter equal to that of the extract of aloes and soap used (about 75 per cent.) plus a small percentage due to the colocynth and cardamoms, and that similarly the extract would yield about 20 per cent. to ether, that percentage representing the amount of scammony resin. How far this is the case may be judged from the following results of eleven samples of the extract obtained from various wholesale houses:—

—	Moisture	Calculated on dry extract			
		Ash	Alkalinity as NaOH	Soluble in water	Soluble in ether
1.	7.05	4.22	1.10	47.4	14.51
2.	11.59	6.33	1.81	69.6	18.86
3.	12.10	5.79	1.08	56.1	15.84
4.	7.18	6.50	1.88	60.7	13.55
5.	9.51	4.05	1.69	79.0	29.56
6.	19.85	5.37	1.58	77.0	15.90
7.	15.29	6.30	2.41	58.6	13.72
8.	8.14	5.03	2.28	82.4	16.20
9.*	2.73	6.62	1.45	62.0	9.55
10.†	4.24	6.80	2.70	55.8	22.39
11.†	3.50	3.30	.37	40.6	6.57

* A very old sample.

† Dry extracts.

The alkalinity of the ash was taken with a view to arrive at the percentage of soap present. The dried curd soap used in preparing extract No. 10 was found to contain 6.92 per cent. of soda (NaOH), so that the ash of this extract would contain just over 1 per cent. of soda, due to the soap; but the total alkalinity as soda of this sample was found to be 2.70, hence more than half of the alkalinity of the ash was due to other ingredients. There is a very considerable variation amongst the samples in all the points examined. This is particularly the case with the ether-soluble percentage, which represents the amount of scammony-resin present.

Mr. E. W. Mann assisted the author in making the experiments for the paper.

In the discussion which resulted the following members took part:—Messrs. Clarke, Williams, Arblaster, Shields, Jessop, and Bindloss. A hearty vote of thanks was accorded the speaker, in conveying which the CHAIRMAN remarked that the Association was also greatly indebted to Mr. Barclay for the sound advice and suggestions he had offered the promoters, and which had proved of immense service in the formation of the Association.

MIDLAND PHARMACEUTICAL ASSOCIATION.

AT a meeting of the Association held on February 11, at Mason College, Mr. R. Darton Gibbs, President, in the chair, Mr. F. H. ALCOCK delivered a lecture on "Vegetable Histology," illustrated with lantern-views by Mr. J. Davis. Mr. Alcock began by giving an outline of the structure of the cell, and the various forms of cells found in vegetable tissue, with their contents, illustrating the varieties by sections from *Clematis vitalba*, *Hoya carnosa*, pinus, tilia, and garden rhubarb. The varieties of starch-depositions were shown in potato, canna, arrowroot, and others; starch-

granules were also examined by polarised light. Raphides and other depositions in cells, lactiferous cells and vessels from euphorbia and dandelion were shown. Then followed a section of the stem of sunflower, showing the varieties of tissue that made up the cortex. The same section showed the chlorophyll grains, and also sieve-tubes; another showed resin passages, epithelial cells, and fibro-vascular bundles, which were fully explained. A section of the leaf of cherry-laurel gave examples of palisade parenchyma, chlorophyll, and stomata, the uses of which were pointed out. A section of the stem of *Ulmus campestris* showed the layers of cork tissue, intercellular spaces, pith, and medullary rays. A section from the root of *Hippuris vulgaris* showed the tissue in an aquatic plant. The structure of the embryo was dwelt upon in detail and illustrated by sections, followed by descriptions of the pollen, anthers, and stigma, the slides showing the difference in structure of monocotyledonous and dicotyledonous plants in their reproductive organs.

At the conclusion of the lecture a vote of thanks was proposed by the PRESIDENT, who hoped Mr. Alcock would give another evening this session; this was seconded by Mr. C. THOMPSON, who said the lecture carried him back to his old student days.

Some lantern-slides of a human hand, a living frog, a purse with coins in it, and a razor in a case, obtained by the Röntgen rays, were exhibited by the Secretary, Mr. C. F. Jarvis, and gave much interest.

PLYMOUTH AND DISTRICT CHEMISTS' ASSOCIATION.

At a meeting of this Association on February 4, six new members were elected. The Secretary announced the gift of a volume—"Carpenter on the Microscope"—from Messrs. Evans, Gadd & Co., of Exeter, for which a vote of thanks passed. A report of the interview with the parliamentary members for Devonport (mentioned in the *C. & D.* of last week) was given. Mr. O. A. Reade has consented to conduct a series of weekly botanical rambles during the summer months for the Junior Association. It was announced that at the quarterly meeting to be held on April 1 next, Mr. S. D. Doble (Tavistock) would give an illustrated lecture on "Three Years in South African Pharmacies," to be illustrated by views lent by Messrs. Donald Currie & Co., of the Castle Line of steamers.

EDINBURGH CHEMISTS' ASSISTANTS AND APPRENTICES' ASSOCIATION.

At the last meeting Mr. GEORGE COULL, B.Sc., gave a lecture and practical demonstration on

"FLAME TESTS,"

in which he fully explained the beautiful methods of dry-way analysis devised by Bunsen, and described in a paper published in the *Zeitschrift für Analytische Chemie*, 1866. These methods, he said, had never received the attention they deserved in this country, and they were generally overlooked by the pharmaceutical student. In German textbooks there was usually a special section devoted to them, but in such a book as Attfield's the borax bead was only once mentioned—namely, under manganese. Teachers, too, seemed to give too little attention to them. All the tests could be applied by means of a Bunsen-flame, which he described, particular attention being paid to the oxidising and reducing parts of the flame. The film test, the match test, the borax-bead tests, &c., were all practically shown and explained.

A TRUSTED CORRESPONDENT informs the *Retail Druggist* that the U.S.A. Congress proposal in regard to patent-medicine men will be to compel the payment of a general licence of \$500 to manufacture or compound medicines, and an additional licence of \$500 on each special line of goods made—\$500 on an ointment, \$500 on a cough-mixture, and so on. This is much too tall for us.

Trade-Marks Applied for.

(From the "Trade Marks Journal," February 12, 1896.)

Figure of axe in an oval; for chemical substances used in manufactures, photography, &c. By Fuerst Brothers, 17 Philpot Lane, manufacturing chemists. 192,208. The essential particular is the device.

"SHIELDRIGG"; for chemical substances used for agricultural, veterinary, sanitary purposes, &c. By Shields & Brown, 12 Gordon Street, Glasgow, coal exporters. 192,381.

"COLES' FAMILY OINTMENT" and miniature portrait; for an ointment for human use. By F. Tunbridge (chemist), S. J. Coles (dentist), and E. Langton (clothier), trading as The Coles Syndicate, 32 Castle Street, Reading, patent-medicine vendors. 190,646. The essential particular is the device.

"TEMALINE"; for a preparation of petroleum-jelly for human use. By Pannett & Neden, 342 Wandsworth Road, London, S.W., herb-dealers. 191,140.

"DOMINOE," and device of an octagon containing four dominoe pieces and portrait of applicant; for chemical substances for use in medicine and pharmacy. By J. A. Campbell, 25 Eglinton Street, Glasgow, manufacturing chemist. 191,808.

"BESORBON," and other wording in square; for a medicinal snuff for human use. By F. F. Hills, The Elms, Campbell Road, Croydon, L.R.C.P. 101,868. The essential particular is the word "Besorbon."

"SADOL"; for chemical substances prepared for use in medicine and pharmacy. By F. C. Calvert & Co., Tower Chemical-works, Bradford, Manchester, manufacturing chemists. 191,964.

"MARATANA"; for chemical substances for use in medicine and pharmacy. By F. Keller, 489 Dumbarton Road, Patrick-by-Glasgow, chemist and druggist. 192,276.

"SOLON"; for all goods included in Class 48. By Lever Brothers (Limited), Port Sunlight, near Birkenhead. 191,161.

"GONDOLA"; for perfumery, toilet articles, &c. By Stewart Brothers & Spencer, Oil-seed Mills, Rochester. 191,612.

"VILLENKOR"; for perfumery, toilet articles, &c. By De Neuville & Co., 13 High Street, Woking, perfumers. 192,155.

(From the "Trade Marks Journal," February 19, 1896.)

Device of beehive and wording in an oval; for chemical substances used in manufactures. By R. Bealey & Co., Radcliffe Hall, Radcliffe, near Manchester, alkali-manufacturers. 191,673.

"OROPIDIS"; for paints and varnishes. By C. H. Huss & Co., East Side, Glamorganshire Canal, Cardiff, paint-manufacturers, &c. 192,213.

"KRONKINE"; for a veterinary medicine to be used internally. By J. A. Gosling, 212 Goswell Road, London, E.C., veterinary surgeon. 191,923.

"ACTOL"; for chemical substances used in medicine and pharmacy. By Dr. F. von Hayden Nachfolger, 57 Leipzigerstrasse, Radebul, near Dresden, Germany, manufacturer. 192,493.

"EODALB"; for a medicinal preparation for human use. By G. W. Nicholl, 25 High Street, Belfast, pharmaceutical chemist. 192,667.

Device of performing elephant and keeper; for a cochineal dye. By J. Greaves & Co., 13 Ridgefield, Manchester, merchants. 191,019.

"BEATALL," and device of beetroot pierced by an awl; for perfumery, toilet-articles, &c. By the Barnes Soap Company, 8 Great Winchester Street, London, E.C., soap-manufacturers. 192,848.

British v. Foreign Goods in New Zealand.

REPLIES to Mr. Joseph Chamberlain's recent circular on the subject of trade-relations between the Mother-country and the colonies have begun to be received at the Colonial Office. We have to thank the Secretary of State for the Colonies for courteously sending us a copy of the following document recently received by him, which is, we believe, the first letter of its kind specifically dealing with pharmaceutical goods:—

[Copy.]

"Devonport, Auckland, New Zealand,
"December 6, 1895.

"SIR,—It is reported by cablegram in the papers here that you are 'taking measures to ascertain to what extent foreign have displaced British imports in the colonies, and whether, if so, any substantial reason exists for such a transfer of trade.'

"It is impossible to deny that foreigners, more particularly the Americans and Germans, have succeeded in establishing a trade here for articles which are manufactured in the United Kingdom. And the reasons are:—

"(1) The greater activity, energy, and enterprise with which the foreigners push their trade.

"(2) That they supply articles as good as the British at a lower price, and better articles at the same price.

"(3) That they more readily adapt their manufactures to the special wants of colonists.

"I may just illustrate these statements by my own experience. I am a medical man, and have been residing and practising in this colony for nearly twenty-three years. During that time I have never seen a traveller for an English firm of wholesale druggists or surgical-instrument makers; but I am, and have been for many years past, annually called on by the travellers of two American druggists, and occasionally by surgical-instrument makers.

"The English firms spend immense sums in the postage and printing of catalogues and price-lists, which are nearly always thrown away unopened. One large firm for years used to send me a price-list which at the then rate of postage cost 8*d.* each month. No doubt they sent one to every registered practitioner in these colonies. One firm of instrument-makers sent to us a few months ago an illustrated catalogue of 850 pages 8vo, containing 3,320 wood-engravings. This book weighs 4 lbs. 1½ oz., and the postage would therefore be 1*s.* 4½*d.* The printing, binding, and wood-engravings must have cost considerably over a thousand pounds.

"A Vienna firm of instrument-makers has a representative here, to whom they consign samples of all their instruments and stocks of the kinds most in use. I went there yesterday, and could see and handle the instruments before buying. As far as I could judge, they were just as good as those of English manufacture, and, of course, much cheaper.

"The same local firm is also the agent for certain drugs in constant use—*e.g.*, quinine. I bought an ounce yesterday for 2*s.* (two shillings) as a sample; the price for Howards' quinine here is 3*s.* 6*d.* (three shillings and sixpence).

"In the whole colony I have never seen an axe of English manufacture—they are all American. I cannot see why Sheffield should not make axes of the American pattern, and as good in material. A very large quantity of hardware is imported from America.

"American wholesale druggists send over yearly very well-mannered travellers who show us samples of their latest novelties. They ask for no orders, and take none except from the wholesale druggists; but a few days after their visit we receive a very handsome sample-box of their preparations, comprising twenty to thirty articles, free of all charges. The value of these boxes I should estimate at from five to ten shillings each, if they were bought from the wholesale houses.

"If British merchants will not show the same enterprise as the Germans and Americans, they must expect to lose their trade.

"I have, &c.,
(Signed) "R. H. BAKWELL, M.D.

"The Right Honourable Joseph Chamberlain, M.P.,
"Secretary of State for the Colonies."

Dr. Bakewell's letter is a very interesting one, and, sweeping as its assertions are, they appear to be written in good faith and with the sincere desire to benefit the author's countrymen. The thanks of the drug-trade are therefore due to Dr. Bakewell for having so promptly and concisely stated his views. As the question of foreign competition is an all-important one to the trade which this journal represents, we have laid Dr. Bakewell's letter before a number of British firms specially interested in the New Zealand drug-trade, with the request that they would state their opinions on the matter. All have courteously done so, and we append the gist of their remarks.

OUR TRADE WITH NEW ZEALAND.

Devonport, we may state in passing, is a place of some 3,000 inhabitants, on the North Island of New Zealand, at the other side of Auckland harbour. It is, in fact, mainly a residential suburb of Auckland, and is inhabited by many well-to-do traders of that town. It is further of interest to point out that the value of the yearly imports of foreign goods in New Zealand is about 6,800,000*l.*, of which in 1894 3,950,000*l.* came from Britain, and only 734,000*l.* from foreign countries. We have also looked up to see whether the official statistics bear out Dr. Bakewell's conclusions, and, from these figures, have worked out the subjoined interesting percentages:—

	1882	1891
Total imports into New Zealand ..	£2,609,270	£6,503,849
Proportion of imports from U.K. ..	64 per cent.	67.23 per cent.
Ditto from British possessions ..	27.63 per cent.	24.16 per cent.
Ditto from foreign countries ..	8.37 per cent.	8.61 per cent.

In 1894 the imports from the United Kingdom were 3,950,000*l.*, compared with 4,482,000*l.* in 1893, a decrease of 11½ per cent.; while those from Germany fell from 68,695*l.* to 68,163*l.*—*i.e.*, remained stationary—but that was an exceptional year. On the whole, the imports of goods from foreign countries remain practically stationary since 1882, in spite of subsidised steamship lines, "foreign activity, energy, enterprise," and so forth, while the "sluggish and unaccommodating" Britishers have in the last decade actually increased their already large trade at the expense of the Australasian colonies and other British possessions. We will leave it to persons interested in foreign trade to solve the riddle, and proceed to the statements of the firms whom we interviewed on Dr. Bakewell's letter.

ONE OF THE FIRMS NAMED.

Messrs. Howards & Sons, of Stratford, write:—

"We beg to acknowledge with thanks receipt of your favour of the 15th inst. regarding the British exports to New Zealand.

"We beg to inform you that the price of our quinine in 1-oz. vials on this market has been below 1*s.* 6*d.* per oz. for the last two years.

"We know that large purchases have been made for Australia.

"It seems incredible that the cost to the medical profession should be more than double the cost to the merchants here and quite out of proportion to the relative cost of German quinine, between which and our brand the difference in price is small."

DRUGGISTS' SUNDRIES.

"No, it is not our price-list which is referred to in the letter, I think," said Mr. Thompson (of S. Maw, Son, & Thompson), after he had read a proof of Dr. Bakewell's letter. "Our catalogue does not contain half that number of pages.

"But, in truth, the letter is a very misleading one all through. During the twenty-three years to which Dr. Bakewell refers our representatives have travelled through New Zealand seven times. Devonport is an outlying suburb of Auckland, with a population, I find, of 2,600. It is quite unlikely that a traveller would go there unless he had special business. It is simply impossible for America to compete with us in such goods as surgeons' instruments and druggists' sundries. The United States import most of these from

England and the Continent with a duty of from 20 to 40 per cent. They have made a certain trade in the colonies in glass goods, I believe. There are some articles which a Vienna house might sell cheap, but I doubt if the quality would be up to our standard. But the New Zealand people do not seem to want any of us. I have just had a letter from my son, who, when he wrote, had just started to travel through New Zealand with a full supply of our samples. He found that he could do no business at all in the colony without first taking a 50% licence. This is imposed on everybody who goes to New Zealand from outside to do business there, and is in addition to the increased duties and to the income-tax which is levied on the business done. I question if there are half-a-dozen houses in the world who will find it pay them to travel in New Zealand on these terms."

"We ought to be very grateful to Dr. Bakewell," said Mr. Thos. Lynch, of Lynch & Co. (Limited), the surgical-instrument makers, "for presenting his view of our commercial retrogression so clearly. The reason why the doctor has not been called upon by a traveller for an English house of wholesale druggists or surgical-instrument makers is no doubt due to the fact that manufacturers in this country abstained from doing so in loyalty to their colonial wholesale customers, through whom the medical gentlemen usually procure their supplies. We believe that such loyalty is not a pre-eminent feature of other nations."

"English manufacturers go to enormous expense to illustrate and describe their goods in catalogues. Experience has shown that in the absence of direct representation this means is effective, and that business of a very satisfactory kind has arisen therefrom, although it must be admitted that a personal call from an efficient representative will frequently turn the scale in favour of the house he represents."

"When the doctor says that, as far as he could judge, the instruments of a foreign maker which he saw were as good as those of English manufacture, we can only suggest that practical use will enable him to form a more decided opinion."

"It is to be hoped, for the doctor's sake, that quite a number of American travellers will call upon him, as, if each of them sends him 10s. worth of samples, it would greatly assist his consumption and reduce his purchases. Is it to be supposed that such samples cost nothing, and, if not, where do these pushing firms expect to recoup themselves, excepting from the doctor *in propria persona*, when once they secure his orders? The fact is, all these foreign makers or shippers have British prices to guide them, and they will sell at any price until they have gained a footing."

"As regards the charge of want of adaptability brought against the Britisher, the doctor fails to supply data. We have always kept our agents posted in improvements or novelties, and all suggestions from them have met with our careful and instant attention, and we firmly believe we are not singular in this respect."

"Unfortunately for all of us, a spirit of 'cheap' has invaded trade. Quality is no longer the first consideration with a great many of the public, and British workmen will not, or perhaps cannot, live as Austrians and Germans do. One more point. In our trade, at any rate, many so-called 'American' articles are so only in name. Their actual origin is more or less obscure."

WHOLESALE DRUGGISTS.

Messrs. Evans, Lescher & Webb write:—

"Our experience is very different from Dr. Bakewell's. Our business connection with the colony spreads over a great number of years, and our traveller covers the island either once or twice every year."

"Our experience is exclusively with the chemists and druggists, and we cannot speak from any experience among medical men, upon whom our traveller does not call."

"We know of several of our brother wholesale druggists who also call regularly upon chemists, but we know of no American or German house that calls with anything like the frequency and regularity that the British houses do. Our experience is that the American houses are too dear, and the quality of the German goods is not appreciated by the trade."

"We do not consider either the German or American

houses able to adapt their manufactures to the special wants of the colonies to anything like the same degree as British houses, who are of necessity far more in touch with British requirements and British feelings than any foreign house can be."

"When the 'returns' come to be made up we are confident it will be found that the percentage of trade done by the colonies with other countries than Britain is exceedingly small. The New Zealand Government seem to object to any country sending travellers to their colony, as they have recently placed a poll-tax of 50% per annum upon home and foreign travellers alike."

"Where is Devonport, Auckland, New Zealand?" Mr. Farries, of Burgoyne, Burbidges & Co., asked our representative, as soon as he heard the object of his call.

Our man got as far as Auckland, but confessed his inability to locate Devonport within a twenty-mile radius. He had not yet consulted the map.

"You don't know, in short," said Mr. Farries; "neither did I till your letter made me look it up. And that is the key to our answer to Dr. Bakewell's statements. If he has never seen our traveller, the plain reason is that our traveller doesn't think it worth while to look up Dr. Bakewell. Do you think a firm like ours don't travel in New Zealand? Why, we have a man, with headquarters in Australia, who does nothing else than travel about the Antipodes. He has visited New Zealand two or three times a year for many years. Of course, he only goes to the large places; it wouldn't pay us to look up every back-block station that calls itself a town. Our representative stops in a place like Wellington or Dunedin perhaps three weeks at a time, calling upon wholesale druggists, and upon such doctors who are large enough to justify us in cultivating their custom. Now, as to price-lists. Why, the Americans, whose enterprise the doctor lauds so greatly, are the most persistent price-list senders on earth. Here are no fewer than six thick lists and pamphlets, all beautifully printed, which have just come to us from one American drug house, and, I have no doubt, will be sent to doctors in all English-speaking countries. If Dr. Bakewell 'pitches all this stuff in the waste-paper basket,' I do not think that he acts with discretion. We have issued price-lists in various languages for years, and our experience is that few medical men act as this New Zealand gentleman says he does. He wants us to establish a depôt in Devonport. As we deal in some thousands of articles, and would require a house and small staff in every place where we establish a depôt, I venture to think such an establishment in Devonport would not be a success; but I should like to sell Dr. Bakewell Howards' quinine at 1s. 6d. per oz. wholesale. I don't think the Germans do anything like the trade that people think. But they certainly try to. Take extract of belladonna. Here is a German list quoting B.P. extract—save the mark!—at barely the price it costs us to make the genuine article. You know that the B.P. extract must be made from plants 'grown in Britain.' Do you think the Germans import the leaves from here for their B.P. extract? Not a bit of it. They offer as 'B.P.' the thing that is not. And I am sure that while British houses supply as good articles as they do they will hold their own everywhere where 'quality' is a consideration."

PESSIMISTIC VIEWS.

Mr. H. S. Wellcome is decidedly pessimistic in his views regarding foreign competition. "As for our firm," he said, "we don't mind it. Attempts to dislodge us only incite us to greater activity; but there is no doubt that foreigners, especially Germans, are gaining 'the inside track' in our colonies. The Americans are not our most dangerous rivals. Of course there is good communication between San Francisco and Australasia; but the rates of freight from Eastern States to the Pacific render it impossible to compete in a great many articles. When the Nicaragua canal is completed things may be quite different. In the meantime, however, I think that there is more truth than poetry in Dr. Bakewell's statements, and the worst thing that English manufacturers could do would be to treat his assertions lightly. Our firm have long had a branch at Melbourne, and call upon medical men and chemists regularly. I cannot help thinking that Dr. Bakewell must have had visits from our traveller. Such letters

as his, however, do good inasmuch as they stir up the Britisher. Now, at the Chicago Exhibition British manufacturers were meagrely represented, whereas the Germans made a fine show there; and as crowds of well-to-do Australasians visited the exhibition, many of them must have come away with the idea that Britain was altogether eclipsed by Germany in most departments of manufactures. The idea, of course, is wrong, but manufacturers have only themselves to blame for it. I cannot speak too highly of Mr. Chamberlain's action in probing the matter to the bottom; and my own impression is that his action will show the absolute necessity of the adoption of some scheme of Imperial federation."

Mr. Ball, of Oppenheimer, Son & Co. (Limited), writes:—"We have just received a letter from our agent in Christchurch regarding the difficulties he has to contend with in establishing a trade in our products in New Zealand. He has, up to the present, had to pay duty at the rate of 40 per cent. on most of our pharmaceutical products, and he is carrying the matter to headquarters at Wellington, in order to get a reduction in the Customs tariff, for he states that many of the competing articles made by the Americans and Germans are admitted at lower rates of duty. Our druggist friends in the colony are quite willing to push the sale of our goods, providing it is not necessary to put on more than one-third upon the home cost; this, of course, adding the cost of freight, packing, insurance, clearing, and the 40 per cent. duty, is at present impossible. Our agent calls upon all the members of the medical profession in New Zealand, and has an extensive connection among them and the retail chemists. Therefore the reason why pharmaceutical products of English manufacture are not so generally seen in the colony as those products of the Americans and Germans must be accounted for, not by laxity in industry on our part, but rather from the handicapping by the enormous Customs tariffs and charges for clearing." [In this matter Mr. Ball, we think, is mistaken. There are no differential duties in New Zealand, the Customs tariff being the same for all nations.—ED. C. & D.]

NEW ZEALAND MERCHANTS.

"A conviction has got abroad very widely in the colonies," said Mr. Edward Grimwade, of Grimwade, Ridley & Co., "that, so far as prices are concerned, the Britisher is out of it against his continental rival. I do not say that the impression is altogether correct, but it exists, and we have to reckon with it. One can see this spirit all through Dr. Bakewell's letter. His complaint that he never receives a visit from any English traveller does not seem to amount to much. It is notorious that several British firms of chemical manufacturers, druggists' sundries-men, and wholesale druggists have had travellers throughout Australasia for many years, but it is not their practice to call upon medical men. With regard to surgical instruments, our experience is that in steel goods British makers are absolutely unrivalled as regards price and quality. In some classes of other goods the Continent may turn out fine articles, but we should certainly not endorse the sweeping statement that continental goods, where equal in quality, are, of course, much cheaper."

"The growth of foreign countries, especially Germany, as manufacturing nations has been marked by an almost inordinate desire on their part to cultivate direct foreign trade relations, and naturally the reputed rich British colonies are among the first markets to attract attention. The desire is a legitimate one, but it has led to many disappointments and business troubles. I am afraid that one of the results of the practical abolition of Customs duties which has just taken place in New South Wales will be to facilitate such bogus trading at Sydney, which is now an open port. Of course, in a place like Melbourne, where a stiff duty of, say, 27½ per cent. *ad valorem* must be paid before the goods can be taken out of bond, it is not easy to carry on such business."

Mr. C. Sharland, of Sharland & Co., the New Zealand drug merchants, said, "I know Dr. Bakewell very well indeed, and am not at all surprised at that gentleman writing to the Colonial Office. I do not agree with the doctor. The only

articles in our trade in which the Americans have succeeded in establishing any business worth speaking of in New Zealand are patent medicines and the specialities of a few houses—such as certain fluid extracts of cascara and buchu, for instance. With regard to American patent medicines, the trade for these has been largely created by advertising, and so far as fluid extracts are concerned the American prices are certainly very much higher than those at which we and other colonial and British drug-firms can manufacture similar articles. With regard to the Germans I distinctly say that, excepting in fine chemicals, they do no trade whatever with the colonies, and even in fine chemicals the great bulk of their trade is done indirectly. As for the charge of lavishly sending out price-lists which is brought against British firms, you cannot call upon any buyers in New Zealand without finding them inundated with the lists of those very firms of German manufacturers who are held up as examples of energetic and enterprising traders. I know the local firm who are agents for certain drugs, and to whom Dr. Bakewell alludes: the head of that firm is the German Consul at Auckland, and he represents one of the principal German manufacturers. In fact, the extent to which German commercial houses make use of the consular representatives of their country is almost incredible, and accounts in many instances for the knowledge they possess of colonial markets. I don't think that this particular German firm are making any great impression upon the drug-trade of New Zealand, although certainly they are trying very hard. It is quite possible that no British travellers call upon Dr. Bakewell, but it is nonsense to say that English firms do not travel in the colonies. We are a New Zealand house, and I am stating facts notorious in the New Zealand drug trade when I say—firstly, that the only competition we have to meet in drugs, perfumery, &c., is from British firms whose agents travel through the colonies; secondly, that where the price of British makers is equal—for instance, in iodides and bromides—colonial consumers will not look at the foreign article; thirdly, that in many cases they prefer to pay a slightly higher rate for British goods; and, fourthly, that, taken as a whole, medical men in New Zealand absolutely decline to buy or use German surgical cutlery. A large Australian drug-house some years ago attempted to introduce German surgical cutlery into the colonies. They had had a pretty extensive business in British-made goods of this kind previously, and thought they could make a little more out of the foreign article. They gave up the attempt within a few months, having lost a good deal of money over it and destroyed their connection in this branch. Certain india-rubber goods made in Germany are slightly cheaper than the British, but the quality is scarcely equal; and some kinds of plated goods are made more cheaply in Germany. Howards' quinine is listed by us at 3s. 6d. per oz., but I need hardly tell you that if a good customer orders a wholesale quantity we do not charge such a price. There is a strong prejudice among medical men in New Zealand against German quinine, and most of that which is used is employed for manufacturing purposes. As to price-lists, experience has shown that it pays to send out handsome lists such as those alluded to, and I have no doubt that the firm to whom the doctor refers do not regret their outlay. With respect to the sample-boxes of which the doctor writes, there is an impression in my mind that he refers to such firms as Burroughs, Wellcome & Co. and others in the belief that they are American houses. I am far from denying that British wholesale firms will have to strain every nerve to keep their trade; but one of the chief things that tells against them is, I think, the excessive cost of all shipping charges in London. I have frequently to give the preference to Hamburg as a shipping port on this account, even although I sometimes may have goods lying in Hamburg for weeks before I can get a steamer. The present New Zealand Government have been misguided enough not only to put a heavy tax on travellers, but to frame a new Customs tariff, which has just come into operation, and which is the heaviest blow the New Zealand drug trade has ever had. Under the impression that the profit on all pharmaceutical articles is enormous, they have increased the duty on the bulk of the chemists' goods to 40 per cent., and they have withdrawn the facilities we previously had for manufacturing perfumes and putting up patent medicines in bond. This,

of course, is good for the British perfumers, but it certainly has hit us very hard."

THE LOMBARD STREET VIEW.

Our representative saw Messrs. Cornelius and F. J. Hanbury at Plough Court. These gentlemen took a rather despondent view of the prospects of British foreign trade, and were inclined to attach considerable importance to the doctor's letter. They did not think it useful to discuss all the questions raised by Dr. Bakewell in detail, but they gave one instance of the manner in which trade was often lost to this country. Some few years ago an American bottle manufacturer called here, and one of the Messrs. Hanbury saw him at his hotel, and was there asked to look over a huge sample-case of bottles. Many of these were found to bear names of Australian and New Zealand customers, and upon Mr. Hanbury expressing his surprise at this he was informed that the American had worked up a very large Australasian trade, although his goods were actually dearer than the British articles, solely on the strength of their excellence of quality. Two years before Mr. Hanbury's friend visited London the American house had no business whatever in Australasia. Nowadays, Mr. Hanbury said, there are some English firms (whom he named), making bottles equally as good as the American article, but in the meantime the others have had some years' start. Mr. Hanbury also mentioned that an American inventor visited the bottle manufacturers here, and proposed the adoption of a certain improved process of manufacture. The British firms all admitted that the process would greatly benefit them, and some of them would have liked to have taken it up, but the answer invariably was that they could not do so because the trade-unions would not sanction it. That, said Mr. Hanbury, is a fair illustration of one of the main causes of the decay of British trade in certain export articles.

New Books.

Engelhardt, Alwin. *Handbuch der praktischen Seifen-Fabrikation*. Second revised edition in two vols. Vol. I.: *Die in der Seifen-Fabrikation angewendeten Rohmaterialien, Maschinen und Gerätschaften*. With 110 illustrations. Post 8vo. Pp. viii. and 424. Paper covers. 6m. Vol. II. *Die gesammte Seifen-Fabrikation nach dem neuesten Standpunkte der Praxis und Wissenschaft*. With 23 illustrations. Post 8vo. Pp. viii. and 469. Paper covers. 6m. (Vols. 136-137 of the *Chemisch-Technische Bibliothek*.) (A. Hartleben, Vienna and Leipzig.)

Glazebrook, R. T. *James Clerk Maxwell and Modern Physics*. Cr. 8vo. Pp. 222. 3s. 6d. (*Century Science Series*.) (Cassell.)

Murrell, Wm., M.D., F.R.C.P. *A Manual of Pharmacology and Therapeutics*. Crown 8vo. Pp. 657. Cloth. 10s. 6d. (Baillière & Co.)

Report of the Royal Commission Appointed to Inquire into the Effect of Food Derived from Tuberculous Animals on Human Health. Part I: Report. 4to. Pp. 24. 2s. 6d. Parts II. and III. (in one): List of witnesses, minutes of evidence and index, with appendix and special inquiries. 4to. Pp. 302. 7s. 3d. (Eyre & Spottiswoode.)

Scoville, Wilbur L. *The Art of Compounding: a text-book for students and a reference-book for pharmacists at the prescription-counter*. Royal 8vo. Cloth. Pp. 264. 12s. (Kegan Paul.)

Squibb, Edward R., Edward H., and Charles F., M.D.'s. *An Ephemeris of Materia Medica, Pharmacy, Therapeutics, and Collateral Information*. Vol. IV. No. 4. January, 1896. Post 8vo. Pp. 1673-1757. (Brooklyn, N.Y.)

The Calendar of the Pharmaceutical Society of Great Britain, 1896. Crown 8vo. Cloth. Pp. 507. 2s. (Offices of the Society, London and Edinburgh.)

The Calendar of the Pharmaceutical Society of Ireland, 1896. Corrected to December, 1895. Vol. XX. Small 8vo. Pp. xiv. and 202. Paper cover. 1s. 6d. (Registrar of the Society, Dublin.)

Thompson, W. G. *Practical Dietetics*. With special reference to Diet in Disease. 8vo. Pp. 824. 21s. net. (Kimpton.)

Turpin, G. S. *Practical Inorganic Chemistry*. Crown 8vo. Pp. 164. 2s. 6d. (Macmillan.)

Walters, F. R. *A Household Dictionary of Medicine, Preventive and Curative*. 2nd edit. 8vo. Pp. 334. 3s. 6d. (Sonnenschein.)

Welford, W. D. *The Hand-camera Manual: A Beginner's Guide to Photography in its Connection with the Hand-camera*. Crown 8vo. Pp. 116. Sewed 1s. (L. U. Gill.)

Whitla, W. *A Dictionary of Treatment; or, Therapeutic Index, including Medical and Surgical Therapeutics*. 3rd edit. Crown 8vo. Pp. 1,000. 16s. (Renshaw.)

Wright, A. *Gout and Rheumatic Gout, Latent and Active: An Up-to-date Treatment Free from Irksome Dietary and other Restrictions*. Cr. 8vo. Pp. 44. Paper covers. 1s. (Kirschaw, Worthing.)

Trade Notes.

WE erroneously placed initials to Hatrick & Co.'s name last week. Their trade title is Hatrick & Co. (Limited).

MESSRS. BRANSON & REYNOLDS, of Leeds, have introduced an "aluminium umbilical pad," which consists of a barber's-basin button, which may be sown to the baby's belt, and is much lighter and more comfortable than the coin generally used.

MESSRS. KOTCH & FRIEDLANDER, of 10 Coleman Street, E.C., have sent us a sample of American grey indiarubber bands, of which they are importers. They put up these bands in cardboard boxes containing 150, of assorted sizes, from 3½ inches down to ¼ inch in length. The bands appear to be strong of their kind, and the makers warrant them not to perish. The firm make a speciality of powder-bands.

WE have received from Messrs. Ross & Co., 111 New Bond Street, W., a copy of their new illustrated catalogue. It is handsomely produced, and is devoted to the whole of their manufactures, including lenses of all kinds, microscopes, telescopes and field-glasses, optical lanterns, cameras and other photographic goods, spectacles, &c. Considering that the firm are the oldest photographic opticians in England, they keep remarkably well up to date.

Marriage.

SANSOM—HAMMOND.—At St. Luke's Church, Barrow-in-Furness, on February 12, by the Rev. E. Francis Cresse, M.A., Dr. Walter Sansom, of Hadfield, son of Mr. Edwin Sansom, retired chemist, Barrow-in-Furness, to Mary, daughter of the late Mr. Samuel James Hammond, of Chorley, and step-daughter of Mr. Joseph Waddington, ironfounder, of Barrow-in-Furness.

Deaths.

COOPER.—The news of the death at Branscombe of Mr. George Cooper will be received with deep regret by chemists in the Exeter district, he having for many years traded as a wholesale chemist and stationer, and taken an active part in the public life in Exeter. Mr. Cooper went to Exeter about sixty years ago as traveller for the late Mr. Matthews, wholesale chemist and stationer, of Fore Street, with whom he afterwards entered into partnership. He subsequently became the sole proprietor of the business, and carried on the establishment until it was destroyed by fire some twenty years ago. He then disposed of his drug business, and afterwards sold his stationery business to retire and live at Branscombe. The deceased filled many public offices during his residence at Exeter. He was elected a member of the City Council as the representative of St. David's Ward, and was subsequently appointed an alderman. He remained on the Council until 1880, when he retired from public life. He also served the office of City Sheriff in 1864-65, and before leaving the city in 1882 was presented on his 71st birthday with a diamond ring by many of his intimate friends, by whom he was held in high esteem and regard. He was 84 years of age, and was twice married, but his only son died when a child.

INGRAM.—On February 7, Mr. John Ingram, chemist and druggist, Sinnahard, N.B. Aged 70.

OLIVER.—Mr. John Oliver, chemist and druggist, Liverpool, died there this week. Mr. Oliver was 78 years old, and had carried on business in the one shop for forty-six years.

PUMPHREY.—On February 17, Mr. John Henry Pumphrey, chemist, Evesham. Aged 40. Mr. Pumphrey was a member of the Society of Friends, and took a great interest in philanthropic movements.

STRINGER.—On February 3, Mr. E. C. Stringer, chemist and druggist, Peckham. Aged 76.

Legal Reports.

THE PHARMACY ACT.

KNOWN TO THE SELLER.

AT Marylebone Police Court on February 13, Herbert Ensel Carne, chemist, Wigmore Street, was summoned for unlawfully selling poison (strychnine) to Julia Hadler, who was unknown to him, and had not been introduced by someone of whom he had knowledge. Mr. F. W. Beck, solicitor, defended. Hadler was housekeeper to Dr. Stonham, of 4 Harley Street, in whose service she had been for over eight years. On January 18 she went to the defendant's shop and asked for some stuff to kill mice. He told her he was not allowed to sell it unless he knew the person he was supplying, and inquired where she came from. She said she came from Dr. Stonham. He then supplied her with six-penny-worth. She had been in the habit of going to the shop for articles for years, and he knew the defendant by sight. The doctor, whose house was just round the corner, had his attention drawn to the matter by his dog being killed by strychnine-poisoning. He thereupon made inquiries and obtained the remains of the packet of poison. He had it analysed, and it was found to contain 13 per cent. of strychnine and a quantity of arsenic. He subsequently saw the defendant, who admitted that he had sold the poison to his servant, and also that he did not know her. The sale was entered in the poisons-book, and Hadler signed for it. Chief-inspector Shannon, D Division, also saw the defendant about the matter, and he said that he told the woman to be careful and not let children get to the stuff, and added that he believed she had come from Dr. Stonham, and if he did not give it to her Dr. Stonham might be angry. Mr. Beck, in defence, contended that defendant had done sufficient to comply with the Act. Mr. Curtis-Bennett said the defendant had neglected the one thing he ought to have done. It was idle to say that this was knowledge. He did not know either the woman's name or her address, and had acted merely on the supposition that her knew her. There would be a fine of 10s. and 2s. costs.

Mr. J. W. HOWARD, chemist, King's Road, Headingley, Leeds, was summoned at the Leeds Town Hall on February 13 before the Stipendiary Magistrate (Mr. C. M. Atkinson), under the Pharmacy Act, for selling a preparation containing strychnine to Mary Grierson, aged 13, of 6 Victoria Road, Headingley, who subsequently used it for the purpose of committing suicide at home. Mr. Ward prosecuted, and Mr. Bowling defended. The defendant pleaded guilty. Mr. Ward stated that section 17 of the Pharmacy Act, which required the vendor of a poison to enter the name and address of the purchaser, the name and quantity of the article bought, and the purpose for which it was required in a book specially kept for the purpose, had been infringed by defendant. On January 26 Mary Grierson went to defendant's shop, and purchased a packet of "vermin-killer." She then went to Sunday-school, and afterwards to her bedroom, where she took some of the poison, from the effects of which she died the same day. For the defence, Mr. Bowling contended that it was unnecessary for defendant to take the girl's name, as he knew her to be the daughter of Mr. Grierson. Defendant was unaware of the composition of the "vermin-killer" until after the inquest, when he wrote to the maker of the preparation, who replied that the powder did contain strychnine. When the girl went to defendant's shop she asked for some rat-powder, as her father wished to destroy some rats. Defendant was fined 3l.

THE SALE OF FELLOWS'S SYRUP BY GROCERS.

In the Market Harborough County Court on February 17, the Pharmaceutical Society of Great Britain sued Messrs. Symington & Thwaites, local grocers, for one penalty of 5l. for selling Fellows's Syrup of Hypophosphites, contrary to the Pharmacy Act. Mr. Grey, barrister, appeared for the plaintiffs, and Mr. J. H. Douglass for the defendants. Mr. Grey pointed out that a bottle of Fellows's Syrup contained 1 gr. of strychnine, and on the wrapper were words setting forth the requirements of the Act. Mr. Douglass said the

bottle in question had a plain wrapper outside when sold. Mr. Grey said that would not affect defendants' liability. The other wrapper was underneath. He quoted the cases of the Pharmaceutical Society v. Piper and the same v. Armson, and called Arthur Foulds, who proved purchasing the syrup from defendants. During the cross-examination of Foulds his Honour asked "Is it a kind of 'Mother Seigel's'?" Mr. Douglass: No. I understand it is a tonic. Mr. Grey: There is no poison in "Mother Seigel's Syrup." Mr. Douglass said he would not contest the case after the evidence given, but his instructions were that, so far from the bottle being taken from a case behind the counter as stated, it was fetched from upstairs. Defendants only bought three bottles of the medicine for a particular customer, who had one, and the others had been in stock for some time. He suggested that his Honour should reduce the penalty. Mr. Grey, however, said that could not be done, and judgment was entered for plaintiffs for 5l. and costs.

SALE OF FOOD AND DRUGS ACT.

WHITE WAX.

AT the Marylebone Police Court, on February 13, before Mr. Curtis-Bennett, Richard Jefferson Dodd, chemist and druggist, 146 Edgware Road, W., and who has a number of establishments in London, was summoned at the instance of the Vestry of Marylebone for selling on January 9, to the prejudice of the purchaser, 2 oz. of white wax which was adulterated with paraffin to the extent of at least 38 per cent.

Mr. Greenwell, solicitor to the Vestry, prosecuted, and Mr. John Hunt, barrister, defended.

Mr. Greenwell, in opening the case, said he could not recollect having had a summons similar to this before. The Act said "A drug shall include medicine for internal or external use." The white wax in question, which was beeswax bleached, was used extensively in surgical and other cases where ointment was required, and it was most desirable that if a person asked for white wax he should get it unadulterated with paraffin.

Mr. Curtis-Bennett: Are you prepared to accept the analyst's certificate?—Mr. Hunt: Yes, sir.

Daniel James Andrews, sanitary inspector to the Vestry, deposed that on January 9 he visited the defendant's premises and asked for 2 oz. of white wax. He was served by the defendant's manager, and paid him 4d. Having gone through the usual formalities, he submitted the wax to the public analyst and obtained his certificate.—Cross-examined: He did not think he should know white wax if he saw it. Three other samples he took that day proved to be pure. White wax was used in laundries for whitening linen; yellow wax would be of no use for that purpose.

Dr. Winter Blythe, public analyst for Marylebone, and medical officer of health, said he examined the wax referred to, and gave the certificate produced. White wax was simply beeswax bleached, and it ought not to contain any extraneous drug. Other samples he had analysed he had found to be pure white beeswax. Paraffin was not a proper ingredient in either white or yellow beeswax.—Cross-examined: The term "wax" was applied to a great many other things besides beeswax. Wax was also used for commercial purposes. Looked at in the bulk it bore a faint yellow tint.

Mr. Hunt: Beeswax is not a drug, is it?

Dr. Blythe: It is decidedly. Continuing, witness said white wax was used for ointments and plasters, and it acted as a carrier of more active preparations. He would not say the effect on the system of pure bleached wax would be practically nil. Nor was he aware that white wax was mixed with paraffin. Pereira's was a valuable book; but Pereira, who said he had never met with wax purely white, was not an authority on this particular point.

Mr. Hunt: I shall show that white paraffin wax has taken the place of spermaceti.

Witness, continuing, said he did not know that if white wax was used for laundry-purposes the admixture of paraffin would be prejudicial.—Re-examined: During the last six months he had analysed ten samples, and this was the only one in which he had found paraffin. Paraffin wax cost 9d., while white wax cost 3s. 6d. per lb. If a physician pre-

scribed white wax he ought to have pure white wax as defined by the British Pharmacopœia.

Mr. Hunt submitted in defence that there were two kinds of wax—the pure beeswax bleached and the white wax of commerce. The wax sold by his client was a composite wax.

Mr. Curtis-Bennett: Then you must tell the purchaser there are two kinds and ask which one is wanted.

Mr. Hunt: I say this does not come within the definition of the Act.

Mr. Bennett: What you were asked for does; yours does not.

Mr. Hunt went on to contend that wax was not a medicine; it was used not for the effect it would have on the system—that would be nil—but as a means of transmitting another body to the system. Neither was it a drug; it was used for commercial purposes.

Mr. Bennett: You must not sell it as white wax when it is not such.

Mr. Hunt: We can call another analyst to prove it is not a drug. There was nothing in the Act, he continued, which said they were to tell the customers that the wax was not a drug. In common parlance white wax was the white wax they had sold; the other was called pure white wax.

Mr. Dodd the defendant, said there were two kinds of wax—pharmaceutical wax or white beeswax, which was not white, and commercial white wax. The latter was a mixture of paraffin wax and white wax to meet the demands of the public. The paraffin wax was added to whiten the pharmaceutical wax, and not for the purpose of securing larger profits. Pure wax would be absolutely valueless. The price of both descriptions was the same. The difference in the wholesale price was that the commercial white wax cost 2s. per lb., and the other 2s. 3d., and not 3s. 6d., as had been said. The ordinary chemist would sell it at 6d. per oz., but he only asked 3d. In dispensing a prescription in which white wax was an ingredient he would always use pharmaceutical wax. He had had prescriptions from medical men when half paraffin was used. He was a member of the St. Pancras Vestry, and knew that that body had, on the recommendation of Dr. Stevenson and Dr. Sykes—both of whom said this wax was not a drug—refused to prosecute in these cases. Cross-examined, he said he was not a member of the Pharmaceutical Society, and went on to explain that white wax was yellow wax bleached by exposure to moisture and light; white wax was mostly used for commercial purposes, the yellow wax was not at all.

The hearing was resumed on February 14, when Mr. Hunt, addressing the Magistrate, said he hoped his Worship was prepared to hold that the wax in question was not a drug.

Mr. Curtis-Bennett replied that he could not say that.

Dr. John Fredk. Sykes, Lecturer on Public Health at Guy's Hospital and Medical Officer of Health for St. Pancras, was then called. He deposed that there were two kinds of wax, and that beeswax, when held up to the light, had a yellowish tint. Paraffin wax, which was mentioned in the British Pharmacopœia, was used in a larger number of ointments than white wax was, and it was also sold (under the name of "white wax" and "wax") for commercial purposes. In writing out a prescription, instead of using the term "pharmaceutical wax," he should use the Latin term—*cera alba*. If he sent out for white wax he should expect a mixture. The bleached beeswax, and the mixture of beeswax and paraffin wax also, had no effect whatever upon the system. There were mentioned in the British Pharmacopœia a number of articles which were used as drugs as well as for commercial purposes. The British Pharmacopœia was used as a standard for pharmaceutical preparations, and for those only. Paraffin wax was not added to the other wax for the purpose of increasing its bulk or weight. The former article was used by laundresses, housewives, and seamstresses for waxing thread and linen, as, for those purposes, it was superior to white wax: it gave a better gloss. When purchasing the pure white wax it was customary to mention the letters B.P.

Mr. Curtis-Bennett: The ordinary public don't go about with B.P. on their lips.

The witness, cross-examined, said the St. Pancras Vestry acted in these matters upon the advice of Dr. Stevenson, the public analyst. White wax might be used as a medicine for external use, and in that case it would be a drug. The two kinds of white wax alluded to had reference to beeswax.

White wax was so called to distinguish it from cobblers' wax. Witness was aware that the wholesale chemists' lists showed two kinds of white wax, one a composition which costs 1s. 8d. per lb. and the other, *cera alba*, which costs about 2s. 6d. per lb. Dr. Stevenson had advised the St. Pancras Vestry not to prosecute in these cases.

Arthur Philpot, traveller for Messrs. Harker, Stagg & Morgan, wholesale chemists, deposed that the wholesale price of wax for commercial purposes was 2s. per lb., and for the other description 2s. 4d. He had never known *cera alba* to cost 3s. 6d. per lb. The reason for mixing paraffin wax with white wax was that wax was largely used in laundries, and if the British Pharmacopœia wax was put on the irons it would adhere to them and would thus spoil the clothes. The only other reason for mixing the two descriptions was to whiten the articles. Witness had never known the mixture to be used for pharmaceutical purposes.

Dr. John Hincks Vinrace, of 88 Gower Street, said that neither the white wax nor the mixture had any effect upon the system; they were used only as vehicles for conveying a medicine to the body—they were perfectly inert. The wax was not of itself a medicine.

Other evidence having been called, Mr. Curtis-Bennett said he had no doubt whatever, after hearing the evidence for the prosecution, that there were two kinds of wax—white wax, and another article of commerce called "white wax," which was white wax *plus* spermaceti or paraffin. If there had been any doubt upon that point, it had been removed by the defence, who had gone out of their way to prove that which was already abundantly clear. There was no doubt that the article was a drug within the meaning of the Act. When one asked for white wax he expected it, and not that article *plus* something else. If white wax for commercial purposes was asked for, then, of course, the compound would be supplied. The compound ought, however, to be labelled as such. To sell it as white wax was to sell "to the prejudice of the purchaser." It was perfectly clear to his (the Magistrate's) mind that this was a case in which a conviction must follow. He did not think it was a case for an exemplary fine, because there was no doubt a great many other people had been doing wrong in the matter. In future, however, if cases came before him, and chemists continued to carry on their business without making a distinction between the articles, as the offences increased so the fines would increase. He fined the defendant 40s., and granted the Vestry two guineas costs.

Mr. Hunt: If I ask you to state a case, will you state you find it is merely a question—

Mr. Curtis-Bennett: I say I find it sold to the prejudice of the purchaser, and, as a fact, that there are two waxes—a white wax, and a wax for commerce.

Mr. Hunt: Will you state a case?

Mr. Curtis-Bennett: No; you can appeal against the decision at the Sessions if you like.

A MYSTERIOUS CASE OF ETHYL HYDRATE.

IN the Lord Mayor's Court, on February 17, before Sir Charles Hall, Q.C., M.P. (Recorder), and a common jury, Messrs. Evans, Lescher & Webb, wholesale chemists and druggists, of Bartholomew Close, E.C., brought an action against Mr. Charles Hassall, a shipping contractor and forwarding agent, carrying on business under the style of Bigland & Co., to recover 23l. 9s. in respect of the non-delivery of a cask of ethyl hydrate, the property of the plaintiffs. The claim was made up of 5l., one cask of ethyl hydrate received by the defendant for delivery to the plaintiffs; 13l. 9s., money paid by the plaintiffs to the defendant to clear the said goods; and 5l. damages for detention. Mr. Lewis Glyn was counsel for the plaintiffs, and Mr. Saunt for the defendant.

Mr. Glyn, in opening, read the statement of claim, from which it appeared that the plaintiffs claimed under three counts—one, for detinue; a second, for money received by the defendant for the use of the plaintiffs; and a third, for money found to be due on an account stated. The defendant had merely pleaded that he did not owe the 23l. 9s., or any part thereof.

The Recorder said that as there was no plea to the count for detinue, the plaintiffs were bound to recover. Mr. Saunt asked for leave to amend his pleas.

The Recorder said he could not allow counsel to add any plea to the claim for detention. If people chose to allow clerks to draw their pleas and put them on the record, they must suffer.

Mr. Glyn, continuing, said that in October, 1895, the plaintiffs forwarded to a Mr. Gothorne, of Natal, a case of spirits—ethyl hydrate. Mr. Gothorne did not take delivery, but returned the spirits to the plaintiffs. The defendant was the forwarding agent. On November 8 the defendant called upon the plaintiffs, and informed them that he would collect the case of spirits if they (plaintiffs) would pay the duty. The plaintiffs at once drew a cheque for the duty—13*l* 9*s*. They afterwards applied over and over again to the defendant for delivery of the cask of spirits, and all sorts of excuses were made for non-delivery. At one time the defendant said his clerk was away ill, but no suggestion was made that there was any difficulty in getting the spirits. At last the plaintiffs put the matter in the hands of their solicitors, who wrote two letters—one on December 31, 1895, and a second on January 27, 1896. The latter was written to the defendant's solicitor and stated:—"We think there must be some misunderstanding on one side or the other, or on both sides. According to our instructions, the cask of ethyl hydrate was sent from Natal for the purpose of being delivered to the plaintiffs. Our clients paid the duty, and sent several times, and promises to deliver it were repeatedly made. Not a word of explanation has been rendered by your client or by you to account for the non-delivery. If there is any excuse of which our clients are unaware, we shall be glad to hear from you." No answer was received, and the only communication of any kind was when the case was in the list recently. Then the defendant's solicitor called upon the plaintiffs, and said there had been a difficulty with the Customs. The plaintiffs were now willing to take the cask, providing the contents were in proper condition, the duty being paid, of course, with a reasonable sum for its detention.

Mr. Saunt: The cask is in the hands of the Customs, and they refuse to part with it.

The Recorder said that it was strange that when the defendant received two civil letters he did not answer for several months.

Mr. Saunt said he was instructed that verbal answers were given, and the plaintiffs knew perfectly well the condition of affairs. The cask had been in the Custom House all the time, and the authorities refused to deliver it up for some reason or another.

The Recorder: Do you mean to say you do not know why you cannot get that cask?

Mr. Saunt: Yes, I do.

The Recorder: Then the jury won't believe it, that is all I can say.

Mr. Saunt: They took the money down to the Custom House, and the authorities refused to take it. They said the contents of that cask were not as described.

The Recorder: Then you do know?

Mr. Saunt: Yes, I do, and my friend knows.

Mr. Glyn: My clients have had no explanation whatever.

Mr. Saunt said his instructions were that these details were explained to the plaintiffs more than once. The fact of the contents of the cask not being as described involved its being sent to a laboratory to have them tested. The authorities found the contents to be an entirely different class of spirits. They said the duty would be very much more than was at first imagined, and they would let the defendant know what it would be. All that he (the learned counsel) was told had been explained to the plaintiffs.

After some further discussion, on the Recorder's directions a formal verdict was returned for the plaintiffs for 20*l*, subject to its being set aside if within four days after taxation all costs of the present hearing and of the amendment of the pleadings were paid; in that event the case to be made a remanet to the next sittings. But the learned Judge remarked that the defendant had better consider his position before he delivered his amended pleas, as he would find it difficult, in view of the two letters which had been read, to satisfy any jury that he was in the right.

SELLING UNCOLOURED ARSENIC.

At the Cork Police Court, on Saturday last, Mr. Timothy Scannell, apothecary, Grand Parade, Cork, was prosecuted

by Head Constable McHugh for having unlawfully sold to James Fleming arsenic in its pure state, and without the mixture, required by law, of indigo or soot; also with having failed, when selling the arsenic, to label the package with the name of the article, and the name and address of the seller; and, finally, with having failed to make a proper entry of the sale in the book kept for the purpose of recording the sale of poisons. Mr. A. Blake, solicitor, appeared for the defence. Head Constable McHugh in his evidence stated that Fleming committed suicide with 4 dr. of arsenic sold to him by Mr. Wall, an assistant in the shop, but by the 33rd and 34th Vict. the person on whose behalf the sale was made by any apprentice or servant was deemed to be the seller for the purposes of the Act. Mr. Blake: We accept the liability; we don't at all deny it. Mr. Blake, in his address to the Bench, said that Dr. Scannell had been in business in Cork for over fifty years, and asked the Bench to say that this case occurred purely from misadventure and not neglect. Mr. Wall, the assistant, knew the deceased well, and gave him the arsenic. As regards the labelling of the package, Fleming called in late at the shop, and owing to the lateness of the hour Mr. Wall merely put the words "Poison" and "Caution" on the package. In reply to the Bench, Head Constable McHugh said the penalties were not to exceed 5*l*. in the first case and 20*l*. in the second. Mr. Wall was examined, and bore out Mr. Blake's statement. The Bench, after consultation, imposed a fine of 1*l*. in the first, and 10*s*. in the second, case.

COUNTY COURT CASES.

NO JURISDICTION.

In the City of London Court, on Monday, before Mr. Commissioner Kerr, Messrs. I. & M. Cohen, sponge-merchants, 53 Houndsditch, E.C., sought to recover 2*l*. 7*s*. for sponges supplied to Mr. Cook, chemist, 68 Brighton Road, Surbiton. The defendant said he first objected to the jurisdiction of the Court. Further, he did not know the plaintiffs, and had never had the goods for which he was sued. Mr. Pearce, who appeared for the plaintiffs, said the defendant had had an account from the plaintiffs, and that showed that the amount was payable in London; therefore the Court had jurisdiction. Mr. Commissioner Kerr said that was not so, and the plaintiffs were nonsuited, the defendant being allowed his costs.

ABOUT A "FROG" WINDOW-DRESSER.

At the Bloomsbury County Court on Tuesday, February 18, before his Honour Judge Bacon, Q.C., Mr. J. C. Garratt, 10 Silver Street, W.C., sole European agent for Messrs. Hance Brothers & White, of Philadelphia, U.S.A., sued a window-dresser, formerly in his employment, for the sum of 9*l*. advanced to him on I.O.U.'s while in plaintiff's service. Defendant counterclaimed for 11*l* for one month's wages in lieu of notice. Mr. Stevens, solicitor, of the firm of Messrs. Stevens & Parkes, appeared for the plaintiff. Mr. James Lock, manager to the plaintiff, deposed that the defendant was engaged as window-dresser to travel round London and the provinces to dress windows for the "Frog in Your Throat" lozenge; at 1*l*. 10*s*. minimum wages while in London and 2*l*. 15*s*. in the country. He was to receive 2*s*. commission on every gross sold, 5*s*. for each window dressed in London, and 10*s*. for each window dressed in the country, railway-expenses and cloak-room fees to be allowed. On the first occasion of the defendant's setting out for a country journey the sum of 5*l*. was advanced to him, which was never repaid. In Christmas week a further advance of 4*l*. was made by a mistake, the first being overlooked. I.O.U.'s were taken on each occasion. The defendant was written to, and after a short interval returned to town, when the plaintiff expressed his willingness to settle his commission-account and send him to Liverpool, but the defendant refused to go unless a fresh advance was made. This the plaintiff refused to do, and the defendant accordingly left plaintiff's employment. The defendant pleaded that he was entitled to the minimum sum, exclusive of commission. The Judge held that the defendant dismissed himself and was not dismissed, also adding that he had never yet heard of a traveller engaged at a weekly wage being entitled to recover a

month's wages in lieu of notice. Judgment for the plaintiff on the claim and on the counterclaim.

STICKY FLY-PAPERS.

At the County Court, York, on February 13, before Judge Masterton, Mr. Hopkinson, Doncaster, chemist, sued Mr. Spurr, a Huddersfield chemist, for 30s, in respect to fly-papers supplied. Defendant claimed a set-off for 25s, and had paid 5s. into court. His contention was that the fly-papers were not right. Plaintiff said they had been spoilt by being kept in an unsuitable place. Judgment was given for plaintiff for the amount claimed.

ADVERTISING PILLS.

ON Wednesday, in the City of London Court, before Mr. Commissioner Kerr, an action was brought by the Reuter's Telegram Company (Limited), Old Jewry, E.C., to recover the sum of 21*l.* 14*s.* 3*d.* for advertising pills for the defendant, Mr. H. C. Eaton, 203 Gray's Inn Road. The plaintiffs had the right of advertising in the Harrow Road tramways, and the defendant entered into a contract for the advertising of certain pills. The defendant now raised a counterclaim for the plaintiffs' alleged breach of contract in allowing the pills of other firms than his own to be advertised in the tramcars. Mr. Commissioner Kerr said it was evident that the accounts would be contested, and therefore he thought the matter had better be referred to the Assistant Registrar for consideration and report. Counterclaims were an abomination, and were simply the modern substitute for the old dilatory and fraudulent pleas with which the public used to be familiar. The case was then referred to the Assistant Registrar.

THE YORKSHIRE RELISH CASE.

THE Court of Appeal, consisting of Lords Justices Lindley, Kay, and Smith, commenced to hear the appeal case of Powell (Goodall, Backhouse & Co.) v. the Birmingham Vinegar-brewery Company (Limited) on Thursday. The defendants have appealed against a judgment of Mr. Justice Stirling granting an injunction against them in reference to the Yorkshire relish made by them. The arguments had not concluded when the Court rose on Thursday.

Bankruptcy Reports.

Re H. C. L'A. BRODHURST, late of Halkett Drug-stores, St. Helier, Jersey, C.I.

THE filing of claims in the *desastre* declared on the property of the above absconded bankrupt took place at the Royal Court of Jersey on February 15, when ten claims were put in, these amounting together to 205*l.* Among the creditors Messrs. Lynch & Co. (Limited) (whom the debtor formerly represented in Jersey as wholesale agent) figure for 62*l.* 12*s.* 8*d.*, and the firm of MM. J. Maubert, Fils et Vimard for 14*l.* 14*s.* 4*d.* A young lady assistant claims 5*l.* for salary, at the rate of 3*l.* per quarter (including 3*l.* in lieu of notice), of which 1*l.* had been paid on account; but the Court gave judgment for but 3*l.*—two months' wages expired, and one month's instead of notice—though the presiding Magistrate said he feared but little would be saved from the *desastre*. A former dispenser was also granted preference for 2*l.*, as two weeks' wages, and the landlord for six months' rent (50*l.*).

Re W. H. WHEELDON, Henley-in-Arden, Chemist.

THE first meeting of the creditors of this debtor was held at the Official Receiver's Office, Coventry, on Monday. Debtor was represented by Mr. Frost, of Birmingham. Thirteen creditors proved for 879*l.*; the deficiency in the estate was put at 789*l.* Wheelton was formerly assistant in the business, which in 1893 he bought from a Mr. Robinson, of Clapham, London, arranging to pay him 30*s.* a week. A few months ago things were not going on so satisfactorily as Mr. Robinson thought, and he issued a circular to persons in the district stating that he had resumed the business,

and making other announcements that the Official Receiver thought were calculated to injure the establishment. Mr. Frost, indeed, said the issue of the circular led to the bankruptcy proceedings, and that action would follow; but Mr. Robinson, who was present at the meeting, pooh-poohed that, and said he regarded the step he took as really the best for the business. The meeting decided to leave the estate in the Receiver's hands to wind up.

Gazette.

PARTNERSHIP DISSOLVED.

Bowman, R. M., and Green, G. R., under the style of Bowman & Green, Ripon, surgeons.

THE BANKRUPTCY ACTS, 1883 AND 1890.

RECEIVING ORDERS.

Archibald, George Tomlinson, Workington, chemist and druggist.
Shorthouse, Neville, Sackville Street, Piccadilly, W., surgeon.

ADJUDICATIONS.

Berry, John, Westbourne Road, Barnsbury, N., coal-merchant, tailor-family draper, and licensed medicine-vendor.
Murray, Thomas (trading as the Murray Supply Stores), late West Bromwich, now Birmingham, late drysalter, now warehouseman.

ORDER MADE ON APPLICATION FOR DISCHARGE.

Thurnam, Francis, Wyatt, South Grove, Highgate, N., surgeon—discharge granted conditionally.

New Companies and Company News.

H. BRONNLEY & CO (LIMITED).—Capital 12,000*l.*, in 12 shares (of which 5,000 are 5 per cent. cumulative preference). Objects: To acquire and take over the business of H. Bronnley & Co., of 31 and 35 Danbury Street, London, and to carry on the business of soap manufacturers and boilers, oil and colour men, importers and manufacturers of and dealers in chemical and other preparations and articles, compounds, cements, oils, perfumes, paints, pigments, and varnishes, and makers of and dealers in patent and proprietary articles of all kinds. The first subscribers (each with one share) are:—J. Heilbronn, 35 Danbury Street, Islington, merchant; F. Heilbronn, merchant, and Miss F. L. Franklin, 109 Priory Park Road, Kilburn; Mrs. J. C. Sassé, 5 Pickard Street, City Road, E.C.; D. Rupert, 23 Great Russell Street, W.C., gentleman; Miss E. Dashwood, 42 Barnsbury Street, Islington; Miss C. E. Young, 13 Wharton Road, West Kensington. The first directors (to number not more than three) are James and Feodor Heilbronn. Qualification, 2,000*l.*

AMELIA NITRATE COMPANY (LIMITED).—Capital 155,000*l.*, in 500 6-per-cent. cumulative preference shares of 100*l.* each, and 10,500 ordinary shares of 10*l.* each. Objects: To acquire the nitrate grounds and works lately belonging to Senor E. Charme or to Weber & Co., known as "Amelia," "Aurora," and "Josefina," and also certain areas of nitrate-ground denominated "Incurables," "Libertad," "Cerro de Trinidad," "Ascension de Loiazza," and "Compania de Negreiros," and other properties, all or mostly situated in the Department of Pisagua, Chili, to adopt an agreement with Weber & Co., and to carry on business as manufacturers and exporters of and dealers in nitrate of soda, iodine, and other products. The first directors (to number not fewer than three nor more than six) are Alfred Quaet-Faslem, H. W. Lowe, Geo. Stielow, Hermann G. Schmidt, and Eduard Steinle. Qualification, 50 ordinary or 5 preference shares. Remuneration, 2,200*l.* per annum, divisible. Registered office, Broad Street House, Old Broad Street, E.C.

THE directors of the Sanitas Company (Limited) have resolved to recommend the payment of a final dividend of 1*s.* and a bonus of 9*d.* per fully-paid share, making, with the interim dividend already paid, a total distribution of 13½ per cent. for the year ended December 31, 1895.

The Sale of Food and Drugs Acts.

THE report of the Local Government Board for 1894 just published contains, as usual, official records of the working of the Sale of Food and Drugs Act. The total number of analyses reported during the year was 39,516 (one to every 734 of the population), an increase of nearly 2,300 over the number made in 1893. In London one sample was obtained for every 492 persons, and in the provinces one for every 801. Within the jurisdiction of the County Council of Montgomery and of the Town Councils of 13 boroughs, including Great Yarmouth (population 49,334), not one sample was taken for analysis during the year; while in the jurisdiction of 10 County Councils and 13 boroughs, including Norwich, Stockport, Northampton, Ipswich, Warrington, and Tynemouth, no serious attempt appears to have been made to carry out the Acts. In all there were 37 districts, with an aggregate population of nearly 2,000,000, in which the Acts were entirely or almost entirely ignored. It is, however, satisfactory to note that in 30 counties and large towns where in 1891 a total of only 291 samples were taken and 64 reported against, 2,003 samples were analysed in 1894 and 232 were condemned; and that while in 1890 as many as 40 authorities took no action whatever to check adulteration in their districts, the number was reduced in 1894 to 14.

The statutory reports received by the Board from the authorities are copies of those made to them by the analysts, and show only the number and description of samples analysed, with the results of the examinations, without including any particulars of prosecutions. Many samples are classed as adulterated, although the amount of adulteration may be so small that it would be inexpedient to take the cases into court. The Board, therefore, now try to ascertain, as regards the samples reported against, in how many instances proceedings were actually instituted and what penalties were inflicted. It is stated that, in 1894, 4,060 samples were reported by the analysts as adulterated, and that prosecutions were instituted in respect of 2,836, fines being imposed in 2,427 cases, amounting in the aggregate to 4,320*l.* 4*s.* 4*d.*, excluding costs in most instances. The average penalty was thus *l.* 15*s.* 7*d.*. There were 8 fines of 20*l.* each; 17 between 10*l.* and 20*l.*; 45 of 10*l.* each; 25 between 5*l.* and 10*l.*; and 169 of 5*l.*. On the other hand, 177 fines were of 2*s.* 6*d.* or less, including 21 of 6*d.* and under; 239 were over 2*s.* 6*d.* and not over 5*s.*; and 438 were over 5*s.* and not over 10*s.*

The Board publish a table showing the proportion of adulterated to genuine articles, and comparing the results of 1894 with those of the previous year. This table shows that, as regards drugs, for instance, the proportion was 11.2 in 1894 and 11.3 in 1893. In milk the proportion was 14.9 in 1893, but has fallen to 11.5 in 1894; and the general percentage of adulteration of all articles has declined from 12.9 to 10.3—"the lowest percentage of adulteration since the passing of the Acts," says the official reporter. As we have often shown, these figures have no value whatever. There is not and cannot be any true comparison, because we have no assurance that the samples are taken with discretion in either one year or the other. A too zealous inspector, an analyst with a fad, or a new legal interpretation can upset the calculation for the whole country. It is surprising, therefore, that the Board should continue to publish these percentages with such complacency year after year.

Of the 39,516 samples analysed, 16,305 were of milk, and of these 1868, or 11½ per cent., were reported against. Many analysts, however, state that they have strong suspicion that in many cases good milk is watered down to the very verge of what is passable. It is noteworthy how the proportion of adulterated milk varies in different localities. In Salford, last year, the proportion of samples found to be adulterated was 1.7 per cent.; in Cardiff, 3.2; in Swansea, 4.1; in Manchester, 4.7; while, in the thirty-two large towns of the Registrar-General's returns, taken together, it was 7.2. In London, however, over one-fifth of the samples examined were reported against. In 1832 the proportion adulterated in the eight towns of Manchester, Liverpool, Birmingham, Leeds, Sheffield, Bradford, Bristol,

and Salford was 22.6 per cent.; but in 1894 the proportion had fallen to 6.7 per cent., while in London the proportion had only been reduced in the twelve years from 24.5 to 21.1 per cent.

Of the 1,868 samples of milk reported against, 1,235 were the subject of legal proceedings: 93 cases were dismissed; 31 were withdrawn; in 58 cases costs only were paid; while in the remaining 1,053 cases penalties, amounting in all to 2,133*l.* 2*s.* 5*d.*, were imposed.

Nothing noteworthy is said in the report concerning bread, flour, butter, mustard, jam, and coffee. Out of 397 samples of sugar analysed, 29 were condemned, most of them being beet-sugar coloured to imitate Demerara. Four samples contained small proportions of mineral matter.

The adulteration of pepper, which was extensively practised a few years ago, is now apparently in abeyance, for in 1894 only 10 samples were condemned out of a total of 1,609 analysed. There were two prosecutions, fines of 1*s.* and 5*s.* being inflicted.

Of 512 samples of tea taken, one was condemned because it contained an excessive quantity of mineral matter (including minute particles of glass), straw, woody fibre, &c., suggestive of shop-sweepings. Four samples, although passed by the analyst, were found to be impregnated with lead.

Lard, of which 1,857 samples were examined, was reported against in 101 instances, but in more than one-half of these cases no proceedings were taken.

Fifty samples of wine were analysed, but only one was condemned. This was a sample of British sherry, which was stated by the analyst to be an extraordinary mixture, not containing any alcohol, but composed of sugar, a little essence, and bisulphite of soda. The only resemblance the mixture had to sherry was in its colour.

Out of 276 samples of beer analysed, 17 were condemned, usually because they contained an excessive amount of salt. There were a few cases in which salicylic acid was added as a preservative, but in two instances the quantity added was 12.6 and 14 gr. per gallon respectively; and in one of these a prosecution resulted in the infliction of a fine of 7*l.*

Notwithstanding the exceedingly low standard of strength for spirits fixed by the Amendment Act, 1879, there is evidence of much adulteration of spirits, for out of 4,028 samples analysed in 1894, 713 were condemned.

Of 1,116 samples of drugs submitted for analysis, 125 were reported against. As usual the principal articles adulterated were nitre [*? spirit of nitre*] (36 out of 108), rhubarb (22 out of 148), cream of tartar (9 out of 59), and sulphur (8 out of 76). Of the remaining 725 samples, less than 7 per cent. were condemned. In 50 cases in which drugs were condemned proceedings were taken, and there were 39 penalties inflicted, amounting in all to 43*l.* 10*s.* 1*d.*

In addition to the articles specifically enumerated in the table, 3,272 samples were analysed, of which 293 were adulterated. More than one-fifth were of ginger, 636 samples of which were examined, and 68 condemned, generally because of the presence of a large proportion of "spent" ginger, which is practically a waste product from the manufacture of essence. There were 52 prosecutions in respect of adulterated ginger, and 38 fines were inflicted, two being of 5*l.* each and one of 15*l.*

Of 435 samples of vinegar, 31 were reported against, and in most cases proceedings were taken, 16 penalties being imposed. Eighteen out of 421 samples of cheese were condemned, and there were 15 fines. Of 234 samples of oatmeal 19 were adulterated. All of the 225 samples of arrowroot were genuine. More than a third of the 200 samples of cocoa were reported against, but prosecutions were ordered in only 35 cases, 29 penalties being inflicted, averaging 1*l.* each. Twelve out of 118 samples of yeast, 14 out of 83 of olive oil, and 13 out of 34 samples of preserved peas, &c., were condemned.

Of the 39,516 samples analysed in 1894, all but 174 were obtained by officers of local authorities. Of the samples purchased privately, 27.6 per cent. were condemned, as compared with 10.3 per cent. of those obtained officially.

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POISONINGS IN 1894.—CARBOLIC RAMPANT.

THE Registrar-General's report of births, deaths, and marriages in England and Wales in 1894 has just been published. We compile from it as usual, and show on p. 289

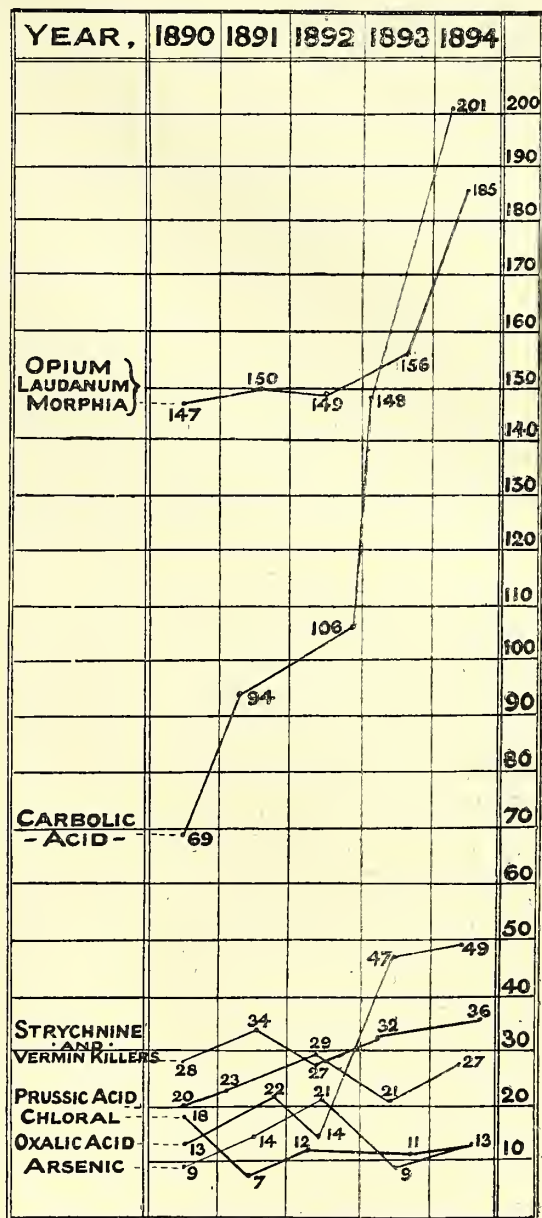
the statistics of poisonings which it contains. The order in which these figures are shown in the report is not convenient, so we have rearranged them as follows:—

	Accidents		Suicides	
	Male	Female	Male	Female
Acetic acid	3	2	—	—
Aconite	4	—	2	1
Alcohol	12	2	1	—
Alkali	—	—	1	—
Ammonia	6	1	1	7
Ammonium sulphocyanide	—	—	—	1
Anaesthetics—				
Chloroform	36	22	2	1
Ether	3	1	—	—
Kind not stated	2	5	—	—
Antimony	—	1	1	—
Arsenic	5	—	6	2
Belladonna	1	2	1	3
<i>Solanum Dulcamara</i>	2	—	—	—
Berries and nuts (poisonous) ..	1	6	—	—
Binitrobenzol	1	—	—	—
Bisulphide of carbon	1	—	—	—
Camphor, spirit of	—	—	1	—
Camphorated oil	—	1	—	—
Cantharides	1	—	—	—
Carbolic acid	23	11	82	85
Carbonic-acid gas	5	1	—	—
Carbonic oxide	4	—	—	—
Caustic soda	1	—	—	—
Chloral	11	1	1	—
Chlorodyne	4	4	3	—
Chromic acid	—	—	—	1
Coal-gas	7	4	—	1
Corrosive sublimate	2	—	3	—
Cressote	—	2	—	1
Cyanide of potassium	5	1	17	—
Digitalis	—	—	1	—
Disinfecting-fluid	—	—	—	1
Fish, poisonous	7	1	—	—
Fruit, tinned	—	—	—	—
" unripe	2	1	—	—
Fumes, coke	1	—	—	—
" kiln	8	—	—	—
" sulphurous	2	1	—	—
Fungus	1	3	—	—
Gunpowder	—	—	1	—
Hydrochloric acid	9	2	19	8
Lead	104	31	—	—
Liniment	1	—	—	1
Mercury	—	2	—	—
Naphtha	—	—	—	1
Nitric acid	—	—	5	3
Noxious gas	3	—	—	—
Opium, laudanum, morphia ..	60	43	54	28
Oxalic acid	2	2	27	18
Paraffin	2	—	—	—
Pennyroyal	—	1	—	—
Phosphorus	7	4	—	3
Potassium bichromate	2	—	1	1
" binoxalate	—	—	—	—
Prussic acid and oil of almonds	4	1	22	—
Ptomaines	6	7	—	—
Putrid meat	2	3	—	—
Salt of lemons	1	—	—	2
Sewer-gas	4	—	—	—
Smoke	4	3	—	—
Strychnia, nux vomica	4	4	11	8
Sulphuric acid	5	3	3	1
Sweet nitre	—	1	—	—
Turpentine	1	—	—	—
Vermin-killer	—	—	5	4
Yew-leaves	—	1	—	—
Zinc chloride	—	—	—	1
Kind not stated	17	6	17	14

The most striking deduction from this table is the predominance of carbolic acid as a means of suicide over all other poisons. On analysing the table we find that the suicides effected during the year 1894 by aconite, arsenic, belladonna, chloral, chloroform, corrosive sublimate, cyanide of potassium, digitalis, oxalic acid, phosphorus, prussic acid and oil of almonds, strychnine, nux vomica, and vermin-killers number 138. Carbolic acid alone is responsible for 167 suicides. That is to say, excluding only opium and its derivatives, it kills more than all the scheduled poisons put together!

How long is the monstrous disgrace of not recognising carbolic acid as a poison to continue? The responsibility for it rests mainly with the Privy Council. The officials of that department have the statutory power to put the sale

of carbolic acid under restrictive regulations by a stroke of the pen; they have been urged to do it a hundred times, formally and informally, and they have hitherto maintained a callous, and we can hardly avoid adding a criminal, indifference to these appeals. They affect to assume that chemists demand the addition of carbolic acid to the schedule for their trade advantage. They ignore the duty



imposed upon them by the Pharmacy Act to add articles to that schedule as occasion may arise, and thus they practically take upon themselves to repeal the statute. Besides, they treat with scant regard the almost unanimous opinion of coroners and the scores of representations on the subject which have been made to them by juries.

Do they consider that scheduling would have no effect? The diagram which we print above is a conclusive reply to any such allegation. In that we compare the deaths from the most popular scheduled poisons and those from carbolic acid during the five years 1890-94. These include

deaths from accidents and negligence as well as suicides' Is not the almost vertical line which indicates the progress of the latter argument enough? Does it not show how poor wretches rush to the solace of the poison which is more than any other available to them? As we have often said before, if the Privy Council want to leave one poison free, let them adopt laudanum, prussic acid, chloral, or almost any of the others, out of mercy to their victims. With scarcely any of them are such agonies associated as with death from carbolic acid.

Scheduling will not altogether prevent poisonings either by accident or with intention; but it interposes, some obstruction to the facilities for suicide—enough in many cases to prevent the accomplishment of the deed—and it induces a certain extra amount of care in the storage of the articles concerned. In this connection it is worth noting how the mineral acids (also unscheduled) are growing in favour as media for suicide. Hydrochloric acid, which was used 17, 11, and 7 times respectively 1891–2, and 3 respectively, accounted for 27 suicides in 1894; the nitric-acid record was 3, 0, and 2 suicides in the three previous years, but suicides due to it rose to 8 in 1894; while sulphuric acid has varied from 8, 3, and 1 in 1891–2–3, to 4 suicides in 1894. Cyanide of potassium is another poison to which suicides are turning their attention. In 1891 it was used by them with fatal effect 13 times; in 1892, 9 times; in 1893, 9 times; and in 1894, 17 times. The dealers in photographic materials, who claim that they ought to be outside the law, and their backers in the Press, may note these figures with advantage.

MITCHAM PEPPERMINT OILS.

THE paper which Mr. John C. Umney communicated to the Pharmaceutical Society last week has practically settled a point of great importance in regard to the oils of English peppermints—viz., why the white peppermint oil is superior to the black. The black yields 3·7 per cent. and the white 13·6 per cent. of menthol esters, while the former contains only 5 per cent. of bodies boiling below 200° C. as compared with 24 per cent. in the white, the latter amount exceptionally high for peppermint oil. Power and Kleber have already shown that the English oil contains a larger proportion of esters than the American, but Mr. Umney's observation that the best American oils contain practically the same amount (12 to 14 per cent.) of esters as white Mitcham oil is one of those startling things which are difficult to realise. Yet Power and Kleber have already shown that out of seventeen samples of American oil twelve contained more than 5 per cent. of esters, only two were under the black Mitcham figure, and three samples contained 14·12, 11·25, and 11·47 per cent. respectively. It does not follow from this that these American oils are superior to the English, for the examination of all the factors suggests that there are still some things to learn. The following comparison will serve to show this. Nos. 1 and 2 are Mr. Umney's figures, Nos. 3 to 6 are by Power and Kleber's, the oils being American distilled, but No. 4 from Mitcham plants grown in Michigan. Nos. 7 and 8 are from a paper by Helbing and Passmore.

	Sp. gr.	Sp. rot.	Per cent. Esters	Per cent. Menthol	Distilled below 200° C. 5 per cent.
1. Black Mitcham ..	·9036	–25·5°	3·7	63·1	24
2. White Mitcham ..	·9058	–33°	13·6	65·5	3
3. Twice rectified ..	·9110	–32·45°	8·61	59·6	8·8
4. Rose Mitcham ..	·9050	–23·35°	4·37	43·6	3·4
5. Crystal white ..	·9105	–23·55°	6·74	50·9	1·8
6. Mississippi ..	·9250	–13·4°	11·47	35·7	24·5
7. American ..	·9193	–29°	—	—	—
8. Mitcham ..	·9032	–12·25°	—	57·6	—

The most noteworthy feature about the comparison is that English oils are below ·910 in specific gravity. No. 4, and another not quoted, are the only American oils approaching Mitcham in this respect. There are other constituents in peppermint oil besides menthol, menthol acetate and valerianate, and menthone—Power and Kleber isolated fifteen bodies altogether. It is scarcely conceivable that the variations in physical characteristics above noted are not associated with variation in the whole of the constituents. It is obvious, too, that the climatic influence upon the plant is enormous. No. 4 we understand to be made from the black Mitcham plant grown in Michigan, yet there are striking differences between it and No. 1. There is apparently much more to learn yet in regard to peppermint oil, and we trust that Mr. Umney may be able to clear up the points of distinction between American and English. It is obvious, too, from the above figures that it is an exceedingly risky thing to fix finality in regard to essential oils. Thus Messrs. Helbing and Passmore have recommended that the Pharmacopoeia should not allow any peppermint oil which yields a distillate below 200° C. If this recommendation were acted upon, it would apparently exclude white Mitcham oil.

THE SHOPS (EARLY-CLOSING) BILL.

SIR JOHN LUBBOCK was especially fortunate in getting his Early-closing Bill read a second time in the House of Commons on Wednesday. The determined opponents of the measure, for whom Sir J. B. Maple was the principal spokesman, must have been absent, and members like Lord Cranborne and Mr. Banbury, who pointed out that great care would have to be taken in considering the details of the Bill in Committee, alone expressed the natural reluctance to admit such a new principle as this Bill embodies into our legislation. The principle is entirely new, said Lord Cranborne, because it is intended not merely to protect young persons but grown men, who have hitherto been considered able to protect themselves. By diminishing the hours of work, he argued, they might not confer a benefit on the working classes, for shorter hours might mean less pay. As long as they were not overworked, plenty of work was what the working classes required. In advocating his Bill Sir John Lubbock put the argument in favour of it very neatly when he said "the question was whether the majority should compel the minority to close at a reasonable time or whether the minority should compel the majority to keep open unreasonably late." Mr. Kearley, the tea-merchant, and Dr. Farquharson spoke warmly in favour of the Bill, which will now be dealt with in Committee.

The Bill now appears in the form in which it left the Select Committee which considered it last year. It provides that if two-thirds of the shopkeepers in a district decide on an hour of closing, the local authority shall be empowered to carry out their wishes. The hour of closing may not be earlier than 7 P.M., except on one day in the week, when it may be 2 P.M. It is not correct, as stated in the *Daily News*, that chemists are to be exempted from the provisions of the Bill. The shops exempt are premises in which any intoxicating liquor is sold by retail for consumption on or off the premises, refreshment-houses and places where cooked provisions are sold, tobacconists' shops, and news agencies. For chemists a special saving clause is provided as follows:—

A pharmaceutical chemist or chemist and druggist shall not be liable to any fine under this Act for supplying medicines, drugs, or medical appliances after the hour appointed by an order made under this Act for the closing of shops; but this section shall not be deemed to authorise

the shop of a pharmaceutical chemist or chemist and druggist to be open after the said hour, save so far as may be necessary for the purpose aforesaid.

This clause should be carefully considered by the trade, as the promoters of the Bill will no doubt give attention to any suggestions for improving it.

RÖNTGEN'S RAYS.

A good deal is still being published weekly regarding Professor Röntgen's discovery, but it consists chiefly of the experience of those who have experimented with the rays, and therefore it is Röntgen's ground that is covered. Mr. Sydney Rowland, B.A., is investigating the whole matter for the *British Medical Journal*, and in last week's number he shows two pictures of coins photographed by electrical induction without light. It looks wonderful, but then—"any theory of atoms which does not explain electrolysis cannot be accepted," says Professor Fitzgerald, and that dictum lies behind experiments of the above nature. Surgically, any progress that there has been is along Röntgen's lines. Two important papers related to the discovery were communicated to the Royal Society last week, viz.:—"On the Generation of Longitudinal Waves in Ether," by Lord Kelvin, and "On the Discharge of Electricity Produced by the Röntgen Rays, and the Effects Produced by these Rays on Dielectrics through which they pass," by Professor J. J. Thomson. It appears that Lord Kelvin foreshadowed Röntgen's discovery a decade since. At the Paris Academy of Sciences, on Monday, a further communication from M. Gustave le Bon was read on the passage of ordinary light through opaque objects. Photographs were exhibited of the ray fish taken in the ordinary way, and one in which the light was made to penetrate the body, with the result that the liver, viscera, and other internal parts were plainly indicated. M. le Bon inclines to the belief that we are dealing in this matter with a case of electrolytic action, and the tendency of the discussion was to support this contention.

PHOTOGRAPHS IN NATURAL COLOURS.

Photogram informs us Dr. Selle's process, referred to last week, consists in taking three photographs on exceedingly thin films, corresponding respectively to the red, yellow, and blue. Aniline colours are used for staining the films, which are then superposed one over the other in order to give the true colour-values. Apparently, therefore, the doctor has done no more than others before him.

APOTHECARIES' HALL.

The *Building News* of February 7 publishes illustrations of the library and court-room of the Apothecaries' Hall. It is stated that the hall of the Society is surrounded with historical associations. It occupies, with its laboratories, warehouses, dispensary, and court-rooms, an area of three-quarters of an acre. Apothecaries' Hall is in the midst of interesting surroundings. Close by was the Palace of Bridewell, built by Henry VIII. for the reception and entertainment of Charles V., where, in 1525, a Parliament was held; where, also, Henry himself and his Queen Catherine lodged while the question of their marriage was argued. It also abuts on Play House Yard, where the beauty and fashion of the day attended the Playhouse of Blackfriars, to hear the plays of Shakespeare, Ben Jonson, Beaumont and Fletcher, and where Shakespeare himself acted. Next to Play House Yard is Printing House Square, now celebrated as the *Times* printing-office. It used to be the large printing-house where proclamations, Bibles, and Prayer-books were issued. In Castle Street stood Castle Baynard. It was held by a follower of Norman William, and thus became ultimately the property of the Clares, and afterwards of Fitzwalter, one of the barons who signed Magna Charta, and the owner of the

land and property yielded them to the Grocers' Company in 1428 for the erection of their hall, thus establishing a remote connection between this ancient trading body and the Apothecaries' Society.

AN ALKALI CENTENARY.

This is the centenary year of the establishment of the Leblanc alkali trade on the Tyne. The first works were started at Walker, in 1796, by a partnership consisting of Lords Dundas and Dundonald, and Messrs. Aubone, John Surtees, John Losh, and Wm. Losh. The last-named, who had lived for some time in Paris, and had probably met Nicholas Leblanc there, was the managing spirit of the concern. The salt-duty of 36*l.* per ton was avoided by concentrating together the brine and sulphuric acid, and thereby obtaining sulphate of soda. John Losh, being a good business man, understood the value of advertising, as may be seen from the following announcement, published by the firm, shortly after its formation, in the *Newcastle Chronicle*:—

ALKALINE SALTS

Such as Chrystals of Mineral Alkali or of Soda, Dried Chrystals of ditto, Barilla Salts, Chrystals of Vegetahle Alkali or of Potash, Are now prepared in large Quantities at the works established near Newcastle-upon-Tyne, from whence Yarn Bleachers, Bleachers, Soap Makers, Plate, Flint, and Crown Glass Manufacturers may be supplied with the Article which suits their respective Purposes.

Not until the repeal of the heavy salt-duties, however, could the manufacture attain large dimensions. In 1799, the production of soda crystals on the Tyne was about 10 tons; in 1825, over 400 tons; in 1830, over 3,000 tons; in 1840, 13,000 tons; in 1862, 51,000 tons; in 1873, 97,000 tons, and in 1882, it was estimated at 104,000 tons. That year marked the maximum, and the output has since declined considerably, the quantity of salt decomposed having fallen from 188,000 tons in 1882, to 90,963 tons in 1893. The four alkali-works on the Tyne in 1830 had risen to 24 in 1873; and these have now very rapidly decreased until five only are in operation on the river now. When the Leblanc alkali trade had attained its greatest growth, there arose in another district the newer form of manufacture—that by the ammonia process—at first on a small scale, but growing with rapidity, so that whilst in 1892, out of 824,000 tons of salt decomposed in the two processes, 519,000 tons were used in the Leblanc industry, in 1894 the total salt decomposed was 795,000 tons, of which the Leblanc process took 434,000 tons. The efforts that have been made to meet the competition have been heroic and prolonged; the adoption of the Weldon "manganese-recovery process" greatly reduced the use of that article; the hand-furnaces were largely replaced by mechanical furnaces, the manufacture of alkali as the chief product of the works was made subsidiary to that of bleaching-powder; caustic-soda manufacture was begun, and in increasing quantity has continued; the salt-deposits of South Durham have taken the place of the Cheshire supply; and, greatest change of all, the recovery of sulphur from tank-waste has given a new product, pure and valuable, from what was waste in one of its worst forms. Early in this century soda crystals were sold at 60*l.* per ton; they are to-day 2*l.* 2*s.* 6*d.* In 1838, bleaching-powder was sold at about 28*l.* per ton; the medium price to-day is 7*l.* In the cost, too, there have been vast reductions, for, without looking back to the days of high duties, the cost of salt to the chemical-maker on Tyneside is about one-half of that calculated as the cost in 1862.

THE AUTOCRAT'S BREAKFAST.—In his recently published "Dinners with Celebrities" Howard Paul tells of a breakfast with Dr. Oliver Wendell Holmes. There were solids, like cold chicken, veal-patties, liver on toast, game, and Cumberland ham, with choice wines and acceptable Apollinaris water, which capital diluent, by the way, is as popular a table tippie in the United States as it is in Europe.

Trade Talks.

ABOUT LEHLIA.

ONE of our staff utilised a spare half-hour the other evening to go along to Oxford Street to see what those "Lehlia" preparations are which the *Queen* and similar papers have been writing about lately. Her Majesty's chemists, Messrs. Squire & Sons, make the preparations, and they have been advertising them rather liberally of late, so we thought it would interest chemists to hear more about them than is stated in the announcement in the *C. & D.*

"Are they quite new?" was our representative's first question to Mr. P. W. Squire.

"Well, a new departure for us," said Mr. Squire; "but we have sold several of the articles in a quiet way for from three to fifteen years. The Lehlia extract is the newest, but we have been making that for about three years, the tooth-powder for at least fifteen years, and the others somewhere between. We thought we would bring them together as a series, and as we got a good name for them registered we added a soap. There are six articles in the series—the 'extract,' a creamy preparation for the skin; a 'cream,' which you see is put up in pretty celluloid cases; the powder 'dentifrice,' a dusting-powder, a toilet-powder, and the soap. The perfume is the same in those that are perfumed, and it is very nice."

"I notice that the prices are popular."

"Yes, that is a feature, for we do not wish them to be out."

Our representative reports that the preparations are put up in elegant style, yet not gaudy, and the fact that they have been so well tested by ladies of high rank is not the least recommendation for them, and any chemist who wishes a new line of high-class saleable specialities cannot do better than introduce these. The prices are not prohibitive even for working-class trade. After talking about these preparations our representative went on to speak of Squire's "chemical food." The history of that preparation if ever it comes to be written should be one of the most interesting chapters in modern pharmacy; suffice it to say in the meantime that the formula which has been rigidly followed by Messrs. Squire since a year or two after the syrup was introduced has little or nothing in common with the so-called "original formula," for it gives a product of constant composition, while the latter still bothers compounders in all parts of the world—for example, we had about it the other day an inquiry from a remote town in Australia. Apart from these considerations, however, and in view of the extreme cutting and variable quality of syr. phos. co., it is something for the conscientious pharmacist to know that a large section of the public at home and abroad are willing to pay the price for Squire's preparation because they find it suit their purpose.

PHYSICAL INSTRUMENTS.

A visit to Messrs. F. Darton & Co.'s premises at St. John Street, Clerkenwell, is always interesting, especially if one happens to get Mr. Darton to walk round the workshops. One learns as much about barometer and thermometer making in five minutes as would take a few school of pharmacy lectures to explain, and Mr. Darton's comments as one walks along with him are a liberal education. During such a visit one afternoon this week a CHEMIST AND DRUGGIST representative saw some new things. The first is not a thing for chemists to sell (although some enterprising men in the trade would not doubt sell it, for we heard of one smart man who sold two of his shop-chairs the other day, making a handsome profit on the transaction). It is a new gas-engine on the Otto principle, occupying a superficial space of about 15 by 9 inches, and yet not a toy, for it is capable of working a small dynamo to give a current for eight incandescent lights or one powerful arc light. It is sufficient, therefore, for any retail chemist who does not wish to spend more than 10% on an electric-light installation, for that sum would more than cover the cost of the engine and dynamo. The engine would also serve for driving mechanical stirrers and the like. The firm stock even smaller engines than this, but they are toys, and very pretty toys too. Mr. Darton and his partner, Mr. Phillips, showed our representative one of these toy engines at work, and this took them on to the subject of scientific

toys for chemists, which they have been considering seriously of late. There is some difficulty in getting novelties in this department, but our representative was shown the "magic box"—a circular nickel-plated box the surface of which is capable of making Highlandmen fling, Irishmen jig, and niggers shuffle, while the waltzing and poetic motion of loving couples and *coryphées* is marvellous—and all for half-a-crown. It is done by an invisible magnet gyrating at great speed. Hundreds of these boxes were sold by 'cute chemists at Christmas-time. Messrs. Darton are also putting up cheap carded parts of electric apparatus, such as bells and lights, to meet the advanced and peculiar tastes of the modern boy. Truth to tell, however, it is the higher walks of electrical technology that they are most assiduously cultivating, and a large part of their premises is now occupied by such work. Their half-guinea medical battery, and half-guinea invalid's bell are marvels of good workmanship and efficiency produced at a low figure.

Personalities.

PROFESSOR LIPPMANN, of Paris, is to open a discussion on "Colour Photography" at the Royal Society on April 23.

DR. KITASATO, the Japanese bacteriologist, who assisted in the discovery of diphtheria-antitoxin, has now added to his distinctions by preparing a leprosy-antitoxin which is successful.

MR. WILLIAM JAMES BUTCHER, son of Mr. G. S. Butcher, chemist, Salford, was one of the successful candidates at the Preliminary Scientific (M.B.) examination of the University of London, recently held.

THE Council of the Pharmaceutical Society have empowered the Board of Examiners to accept the diploma of pharmaceutical chemist granted to Mr. Dompé, of Milan, in lieu of the First examination. Mr. Dompé will now offer himself for the Minor.

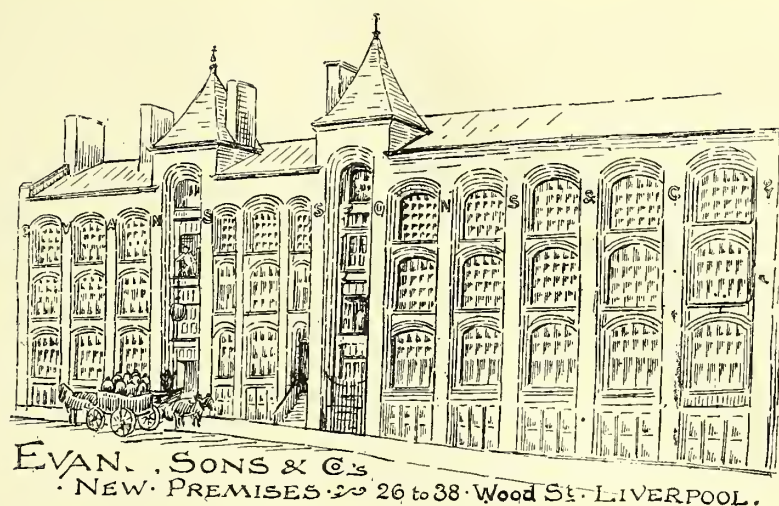
MR. JOHN BARCLAY, B.Sc., having resigned the lectureship in materia medica and pharmacy at Mason College, Birmingham, Mr. J. Dencer Whittles, L.D.S., has been appointed in his place. Mr. Whittles was trained in pharmacy, and for some time had assisted Mr. Barclay as demonstrator.

AT a church dinner held at Coventry, on Monday last, Mr. F. Bird, chemist, was the recipient of a handsome gold watch bearing the following inscription:—"Presented to Frederick Bird by numerous friends of the congregation of St. John's, Coventry, in recognition of twenty-four years of faithful service as churchwarden." It was stated that during these twenty-four years 10,000% had been spent in connection with the church, a large portion of which had passed through Mr. Bird's hands.

MRS. CRAIG, wife of Mr. John Craig, chemist, Hawick, delivered a lecture in that town last week on "The Catrail." The subject is an archaeological one, for the catrail consists of a ditch with mounds at each side, and extends across a large part of Teviotdale, Ettrick, and Tweed vales. Mrs. Craig, who proved to be an excellent lecturer, holds that the catrail is probably the oldest earthwork in the three kingdoms, dating far before the Roman invasion, and that it was a sacred enclosure in which well-born youths were instructed by the Druids in mystic lore, in warfare, and in feats of strength.

THE *Pharl. Era* has been waxing enthusiastic about Mrs. Pearl Craigie, the "John Oliver Hobbes" of literature, who has been over in New York lately scattering epigrams. "She is an American girl," says the *Era*, "and the daughter of an American drug-man. The 'old-timers' who can go back to the days of Demas Barnes & Co., from '57 to '67, will recall her father, John Morgan Richards, who was one of that firm's staff along with Brent Good, Amos Torrey, William P. Ward, and others. Mr. Richards went to England for Barnes to introduce some American specialities. When his contract was up he decided to stay there on his own account. For years he has had an immense business, and is now a very rich man, and stands in the front rank of London merchants, to which position he is justly entitled by his great business ability and his unswerving integrity."

Messrs. Evans, Sons & Co.'s New Premises, Wood Street, Liverpool.



WE give herewith a sketch of the new building erected by Messrs. Evans, Sons & Co., which has been rendered necessary by the large increase in their trade in coated pills, essential oils, granular preparations, and tinctures.

These premises have an extensive frontage to Wood Street of about 150 feet, and possess a distinctive architectural character, which is emphasised by the introduction of two towers with steep roofs and deeply recessed openings, in which are fixed the steam-cranes, one being used for receiving and the other for the delivery of goods, which are kept working all day long.

The whole front is faced with the best red Ruabon bricks, and the great windows lighting the various floors are filled with iron-work especially designed in architectural character and painted white, giving the front a bright and cheerful character. The iron ties, which are often an eyesore in this class of building, have been converted into an ornament, and, as wrought-iron letters, display the name of the firm along the front; but the general effect of the front will be best realised by the accompanying view.

There is a very extensive basement under the whole of the building, and this has been excavated out of the solid rock—a very expensive operation, but resulting in magnificent cellarage, which, moreover, is well lighted throughout, the ground floor being kept well above the level of the street. All this basement is lined with white glazed bricks and paved with granolithic cement, so that the floors are easily kept clean.

In the rear is the boiler-house, also carved out of the rock, with space for the great boilers, and a chimney-shaft 100 feet high. Here the power is generated for the whole of the

manufacturing machinery throughout the building. Over the boiler-house is the stove-room, with a floor of iron plates, so that great heat is obtained at all times for drying various articles.

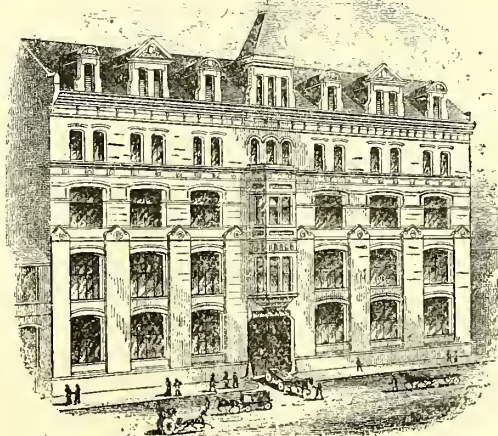
On the ground floor, which is fireproof, is the great still-room, where oil of santal-wood, cloves caraways, &c., will be distilled, the stills being filled from the floor above. Over this section are the manager's and clerks' offices, and a private laboratory lined with white tiles and fitted with every convenience for the manager, Mr. M. Conroy, F.C.S.

Above the three floors is one large area capable of being used for different purposes as the business requirements vary. At present a large area is required for pill-making and storage. All the floors are made of strong joists and iron girders carried on massive columns, and capable of supporting any load that is likely to be placed upon them. Arrangements are made for fire protection and escape, and the flat asphalt roofs are utilised for the condensing-tanks.

Some idea of the extent of this new building (which is only an addition to the mill-building, which itself is only one of a much larger group of buildings) may be formed when it is stated that there is an area of over 4,000 square feet on each floor, and a total area in this addition alone of 23,520 square feet, or considerably over half an acre. The building has attracted some attention in Liverpool owing to the handsome style of architecture. The architect is Mr. Aston Webb, of London, who is well known as the architect of the Birmingham Law Courts, the extension to the South Kensington Museum, &c.

Reade Brothers' New Premises at
Wolverhampton.

WE annex an engraving of the handsome new premises which Messrs. Reade Brothers (Limited) have recently acquired for the purposes of their business at Cleveland Road, Wolverhampton. Mr. Reade commenced business in Wolverhampton thirty years ago, and in 1873 his firm purchased the drug and chemical business which had then been carried on for exactly 100 years by Messrs. Mander, Weaver & Co. Messrs. Reade Brothers have extended their business especially in the direction of the manufacture of varnishes, &c., to such an extent that spacious and well-fitted works have been found necessary to cope with their requirements, and these are provided in the building which we illustrate. The building is one which they have taken over, and is a very substantial structure. The opening of the works was celebrated by a banquet, whereat hearty good wishes were expressed for the firm's welfare.



Trade Reports.

42 CANNON STREET, E. C., February 20.

THE present week has been chiefly remarkable, so far as the drug-trade is concerned, for the great activity in cod-liver oil, of which the bulk of the old stock has been cleared at advancing prices, while new remains extremely dear. In other drugs there are not very many changes. At to-day's auctions a fair proportion of the goods offered was sold, and in several instances improvements in price took place. Such was notably the case with cardamoms, which were from 2*d.* to 3*d.* dearer. Senna was also higher. Ipecacuanha slightly dearer. Rhubarb and gamboge very full up, and benzoin slightly higher. Beeswax also realised better prices. Asafoetida sold at a considerable decline. Buchu slightly easier. Copaiba balsam very firm. Crude camphor is lower, judging from a sale at to-day's auctions. The cinchona-sales went off fairly steady. Fine colocynth keeps firm. Cubebs are neglected. Dragon's-blood and ergot of rye slow at low rates. Honey steady. Insect-flowers again higher. Jalap is easier. Musk unaltered. Menthol tending lower. Japanese peppermint oil much easier. Oils of star-anise, cassia, and American peppermint are also quieter. Castor oil higher. Opium dearer for manufacturing. Rhubarb very firm. Vanilla rather lower. In fine chemicals there are few alterations. Citric and tartaric acids are quiet but firm. Cream of tartar quiet. Sulphate of copper dearer. Carbolic acid very firm and tending higher. Quinine dull. Arsenic remains scarce. In spices there has been a considerable advance in Cochin ginger; Jamaica is also dearer. Nutmegs, mace, and pepper remain quiet. Zanzibar cloves steady. Pimento very firm. Shellac is higher. In oils the chief alterations are as follows:—Linseed, slightly lower; rape, 3*d.* easier for crude, but steady for refined, at 25*s.* Cotton-seed oil easier, at 14*s.* 4½*d.* for crude, and 16*s.* 9*d.* for refined. Cocoa nut, palm, and olive oil unaltered. Turpentine slightly easier, at 20*s.* 1½*d.* Petroleum slow: American, 5½*d.* to 7½*d.*; Russian, 5½*d.* per gallon. The Bank-rate remains 2 per cent., and bar-silver is slightly higher, at 31*d.* per oz.

Our New York correspondent, telegraphing on Thursday morning, says:—"The feature of the drug-market this week has been the heavy purchases on the part of consumers of and speculators in *Copaiba balsam*. All kinds here are in small supply, and the closing quotation is 36*c.* per lb. for genuine Pará. Genuine *Tolu balsam* is offering at 48*c.*; ditto *Peruvian* at \$2.25 per lb. *Spermaceti* is stronger, more money being wanted by the refiners here. *Senega-root* declining in price. *Mexican sarsaparilla* also rather easier. *Oil of peppermint* is very dull of sale, although the stocks of all kinds are said to be very low here. *Spearmint oil* is quoted at \$2.10 per lb. for good quality. Genuine *Oil of wintergreen* at \$1.25. *Quinine* quiet at 26*c.* per oz. for German in bulk. *Gum chicle* is a turn easier; 36*c.* per lb. would buy this week. American *Saffron*, good quality, is quoted at 40*c.*"

Our Amsterdam correspondent, telegraphing on Thursday night, states that at the cinchona auctions held in his city to-day, 6,251 packages of Java cinchona (out of 8,040 packages offered) sold at an average unit of 282*c.* per half-kilo. for the manufacturing bark, a decline of 0.18*c.*, or, say, 6 per cent. upon the January auctions, due chiefly to the excessive quantities of

bark placed on sale. The principal buyers were:—G. Brüggele (American and English makers), who bought the equivalent of 7,223 kilos. of sulphate of quinine, the Auerbach works 3,678 kilos., the Brunswick factory 3,495 kilos., the Mannheim and Amsterdam works 8,261 kilos., the Frankfurt-on-Main and Stuttgart works, 1,727 kilos., and various buyers 2,708 kilos. The range of prices was: *Druggists' barks* 5½*c.* to 32½*c.* (= 1*d.* to 5½*d.* per lb.); *manufacturing barks* 6*c.* to 76½*c.* (= 1½*d.* to 1*s.* 3¾*d.* per lb.).

Our Norwegian correspondent telegraphs, on Thursday afternoon, that the weather in the fishing-districts remains exceedingly boisterous. The total number of Telegram. cod caught up to date is 1½ million against 6,100,000 at the corresponding date of last year. The quantity of unrefined oil made this week has been only seven barrels, against 20 barrels in the corresponding week of 1895. The quotation for best non-congealing oil remains 220*s.* per barrel f.o.b. Bergen, and for last year's oil, of which there is very little left, 180*s.* f.o.b. is required.

Our Smyrna correspondent, telegraphing on Monday, February 17, states that it is now certain that the opium-crop throughout Asia Minor has been considerably injured by the recent frosts (see Telegram. *C. & D.*, February 15, 1896, page 269), and that an advance is imminent. New manufacturing-opium is extremely firm at the parity of from 7*s.* 8*d.* to 7*s.* 10*d.* per lb. f.o.b., according to holder. A further telegram from our correspondent, dated Wednesday evening, states that speculators and agents for American houses are buying freely at the rate of 8*s.* per lb. for fair current manufacturing, and 8*s.* 2*d.* f.o.b., for *Yerli* opium. The market is advancing, and the frost in the growing-district continues.

Our Constantinople correspondent wires on February 19:—"There is a strong movement in Telegram. opium here, and prices are advancing, as the winter sowings have everywhere been damaged by frost."

U.S. Drug- The following figures show the imports of imports. some of the principal drugs into all the ports of the United States during the eleven months from January 1 to November 30 of 1894 and 1895 respectively:—

	1894	1895
Argol, or crude tartar lbs.	23,592,189	26,285,473
Bark (quinine) lbs.	2,488,643	1,800,227
Camphor (crude) lbs.	1,278,892	1,137,437
Chlorate of potash lbs.	4,061,904	4,549,670
Chloride of lime lbs.	86,383,850	94,498,522
*Coal-tar colours and dyes	\$1,883,591	\$2,558,902
*Glycerine lbs.	7,390,025	15,040,236
Gum Arabic lbs.	1,363,468	1,131,808
Opium (crude or manufactured) .. lbs.	708,708	324,927
*Opium, prepared for smoking .. lbs.	66,249	98,948
*Perfumery and cosmetics	\$471,544	\$561,678
Quinine, and other cinchona salts .. oz.	2,106,142	1,715,761
*Soap (toilet) lbs.	677,690	720,721
*Soda—Cautic lbs.	40,813,438	62,857,278
Sal soda lbs.	22,315,829	7,632,183
Soda ash lbs.	254,128,809	258,679,276
All other salts of lbs.	16,750,721	9,216,681
Vanilla lbs.	154,911	185,272

* These goods are dutiable, the others mentioned in this note are free.

We referred, in our issue of January 25, to the remarkable increase in the foreign trade of Cape Colony, as shown in its recently-published Board of Trade statistics. Fuller details, received by this week's mail (our previous comment was based upon a telegraphic extract), bear out the most sanguine expectations. They show 1895 to have been one

of the most extraordinary years in the commercial history of South Africa. The imports of specie into Cape Colony total up to the enormous sum of 5,432,475*l.*, as compared with 239,451*l.* for the previous year. This is mainly the payment by England for gold scrip, and shows how rapidly and to what proportions the paper export of the colony has increased. One of the most notable features of the returns, and certainly the most gratifying, is the continued increase in the export of colonial produce. The figures for the year are 3,572,860*l.*, as compared with 3,342,158*l.* for 1894. Farming is in a healthy and hopeful condition. The diamond export is rigidly regulated according to the conditions of the market, but it is satisfactory that circumstances have permitted an increased export. For the year 1895 the exports amounted to 4,775,016*l.*, as compared with 3,013,578*l.* in 1894. The gold exports in 1895 reached 7,975,637*l.*, as compared with 7,147,308*l.* in the previous year. The grand totals for the year are:—Imports, 19,094,880*l.*; exports, 16,904,796*l.*

As gum-chewing (*horribile dictu*) is one of the latest American notions coming into favour in this country, the following review of the "chicle-market," which A "Chicle Syndicate," appears in the *New York Shipping List*, may be of interest:—"The Mexican ports have poured a steady stream of stock into New York lately, and when the shippers found that the supplies were being concentrated here for speculative purposes they put up the price. When this was done the manipulators of the corner purchased all available supplies on spot within a range of 32*c.* at 36*c.* per lb., and then advanced the quotation to 37*c.* This figure is considered temporary, as the market is now in a condition for violent fluctuations. It is not unusual for chicle to go up and down the scale of values in leaps, as it is a favourite article for manipulation. Chicle has sold at 22*c.* and above \$1 per lb., according to market conditions. The average New York imports are about 2,500,000 lbs. a year, and the present stock is estimated at 750,000 lbs." The "chewing-gums season," it appears, is in the summer, "owing," says our contemporary, "to the operation of slot-machines at seaside resorts and the bicycle season." Chicle furnishes the basis for about 5,000,000 lbs. of chewing-gum each year, and these figures do not by any means represent the whole industry, as there are various substitutes, the chief of which is spruce-gum.

ACID (CARBOLIC).—Remains very firm. Owing to the exceedingly brisk demand there is now very little stock left, and the manufacturers are sold out for some months ahead. The probability therefore is that we shall still see a further advance. *Crude* 60 per cent., 2*s.* 3*d.*; 75 per cent., 2*s.* 7½*d.* *Crystals* 39-40°, C, 8*d.*; 34-5°, C, 7*d.* per lb.

ACID (CHRY SOPHANIC).—Scarcely any good araroba can be had at any price. Some of the foreign manufacturers of chrysophanic acid ask 25*s.* per lb., but that figure can be shaded in second hand.

ACID (TARTARIC).—A firm market. Higher prices are generally expected in the near future. Meanwhile the English makers continue to ask 1*s.* 3*d.* per lb. for prompt delivery and 1*s.* 3½*d.* per lb. for forward. Foreign makers require 1*s.* 3*d.* per lb. "c.i.f." terms; second hand, 1*s.* 2½*d.* spot.

ALOES.—Of *Cape* aloes, 43 cases offered and 24 sold at steady rates—22*s.* to 22*s.* 6*d.* for fair to good bright hard, and from 21*s.* down to 14*s.* for fair to ordinary mixed with sand. *Curaçao* aloes steady, and in fair demand, 25 bags of good bright liver realising from 33*s.* to 41*s.*; 418 packages, mostly gourds, from 32*s.* for fair, and from 18*s.* down to 8*s.* for ordinary dark to poor common quality. Good *Socotrine* aloes is held for 80*s.* to 82*s.* 6*d.* per cwt. A parcel of 6 kegs very common was offered without reserve, but no bid could be obtained for it at 5*s.* per cwt. A lot of 77 bales low *East Indian* aloes from Bombay, imported in 1893, sold at from 11*s.* to 17*s.* 6*d.* per cwt.

ARSENIC.—Strong at 20*l.* per ton for powdered white English.

ASA FETIDA.—At to-day's auctions 587 packages from Bombay and the Persian Gulf were offered for sale. There

was little demand, but the bulk of the stuff was pretty firmly held. One owner, however, sold 75 packages, partly pinky block and almonds mixed with straw, at a reduction of from 8*s.* to 12*s.* on the valuations, the parcel realising only 29*s.* to 33*s.* per cwt., whereas last sale part of it was bought in at 60*s.*

BALSAMS.—*Peru* is easier; 8*s.* 3*d.* per lb. is now only a nominal price. *Copaiba* tending upwards. At auction 1*s.* 11*d.* per lb. was asked for good thick pale *Maranhm*. For a cask of fair *Balsam Canada* a bid of 9*d.* was refused, the lot being bought in at 1*s.* 2*d.*; and some 26 packages of genuine *Tolu balsam* were bought in at from 2*s.* 2*d.* to 2*s.* 3*d.* per lb.

BENZON.—*Siam* gum is very firmly held; 33 packages were offered to-day, of which only 6 sold at 23*l.* 10*s.* for good medium to bold pale detached almonds, an advance of about 10*s.* Small almonds in block realised 8*l.*, clean glassy almondy block is held for 10*l.*, and clean siftings in block offer at 9*l.* per cwt. *Sumatra* benzoin is also firm to dearer; 35 cases sold at 8*l.* 12*s.* 6*d.*, rising to 8*l.* 17*s.* 6*d.* for good seconds small to medium almonds fair packed, 6*l.* to 6*l.* 15*s.* for dull rather false packed to ordinary small almonds. For fine pale almondy seconds 9*l.* 10*s.* is said to be the price. Of *Palembang* gum several lots were offered, but no business was effected.

BUCHU.—About ½*d.* easier; 28 packages out of 60 which were offered finding buyers at 4½*d.* to 4¾*d.* for fair to good bright round green, and from 2¾*d.* to 3¾*d.* for yellow to fair green.

CAFFEINE is very quiet at 18*s.* per lb. The market, especially in America, seems to be a little over-supplied.

CALUMBA remains quite dull. About 55 bales ordinary dark sold at 8*s.* 6*d.* per cwt. subject to approval.

CAMPHOR (CRUDE).—At auction to-day 49 cases newly imported *Formosa* camphor, very damp, were offered; bidding began at 160*s.*, and the parcel was knocked down at 165*s.* per cwt., showing a reduction of several shillings on the previous market price.

CANELLA ALBA.—For 5 bales rather small broken but pale dark, a bid of 23*s.* 6*d.* per cwt. was refused.

CANNABIS INDICA.—Steady; 100 bales rather dusty with fair tops, from Bombay, sold at 2½*d.* per lb. to-day, while for 60 Robbins good green 3½*d.* per lb. is the price named.

CANTHARIDES remains neglected, the limit for fair Chinese flies being 1*s.* per lb.

CARDAMOMS.—A moderate supply of 99 packages was almost all sold, with excellent competition, at an advance of from 2*d.* to 3*d.* per lb. Small to medium round palish *Mangalore* realised 2*s.* 5*d.* per lb. *Ceylon-Mysore*, medium to bold fair pale, 2*s.* 9*d.* to 2*s.* 11*d.*; small to medium, 2*s.* 5*d.* to 2*s.* 7*d.*; fair rather small pale, from 2*s.* to 2*s.* 4*d.*; yellow medium to bold, 1*s.* 9*d.* to 1*s.* 11*d.*; small ditto brownish, 1*s.* 6*d.*; ordinary small brown and specky from 1*s.* 3*d.* to 1*s.* 5*d.* per lb. According to the *Ceylon Examiner*, the season's crop has not been a success, owing to the fact that picking has been proceeding, off and on, throughout the year. There is a very great demand for Malabar cardamoms from Bombay, and the Borah and Parsee merchants have run up prices considerably. The European market supply of "Malabar" kinds will therefore be almost *nil*. It is only recently that Bombay consumers have taken a fancy to Malabar fruit; in the past they preferred the well-bleached white bold Mysore kind.

CASCARILLA.—Five barrels of siftings were offered to-day, and a bid of 26*s.* was declined for them. Ten bales, of which no sample was shown, sold at 44*s.* per cwt.

CASSIA FISTULA.—A parcel of 17 bales lean and wormy pods from Hamburg sold without reserve at 8*s.* to 8*s.* 6*d.* per cwt.

CINCHONA.—At to-day's drug-sales 37 packages fine dark cultivated yellow *Calisaya*, all damaged, sold at from 7*d.* down to 1*d.* per lb. For fair *Maracaiibo*, imported *via* Hamburg, 9*d.* is the limit. A lot of 26 serons fair to fine *Huanoco* bark realised good prices, from 10*d.* to 1*s.* per lb. At the London auctions on Tuesday a considerable supply of bark was offered, the whole of it representing about 10 tons of quinine. Of Indian bark 1,162 packages were shown, of

Ceylon 449, African 263, and Javan 389. Of South American bark 319 bales cultivated Bolivian Calisaya quills realised from 1½d. per lb. for common damaged to 3½d. per lb. for fair. The Eastern barks were mostly sold with fair competition at unchanged rates, the unit averaging 5d. per lb. The imports of cinchona-bark from British India (not including Ceylon) into London in 1895 only amounted to about 6,800 bales, against 10,000 bales in 1894. The exports from West Africa have declined from 6,000 bales in 1894 to 1,750 bales in 1895.

COCA-LEAVES.—Five cases common dark and damaged leaves sold without reserve to-day at the comparatively high figure of 7½d. per lb.

COCCULUS INDICUS.—Tending lower; 30 bags were bought in to-day at 8s. 6d. per lb.

COCHINEAL.—A fair amount of business has lately been transacted at steady rates, but the market closes somewhat easier at 1s. 4d. for fine rosy black *Teneriffe*. It is said that the collection of the cochineal at the present market rates is scarcely remunerative.

COLOCYNTH keeps exceedingly firm. A parcel of 18 packages *Turkish* apples was shown. Fine pale is held by one broker for 2s. 6d. per lb., and another sold a case at 2s. 5d. per lb. *Spanish* colocynth is freely offered; 29 packages were all bought in—fair at 1s. 2d., medium to dark at from 9d. down to 7d. per lb.

COPPER SULPHATE.—Still advancing, in sympathy with the rise in the metal, and also partly on account of the fact that the principal buying-season is now coming on. Fine qualities, 98-99 per cent., are quoted at 16l. 15s. to 17l. in London, and at 16l. 15s. per ton f.o.b. Liverpool; ordinary grades at 15l. 15s. in London.

CREAM OF TARTAR.—A quiet market with, perhaps, a slightly easier tone. Best white French crystals offer on the spot at 105s. to 106s. per cwt.; powder at 107s. to 108s.

CUBEBS remain neglected; 77 packages from Singapore were bought in. For fair sifted 32s. 6d. is asked.

CUSCUS.—For ordinary quality 12s. per cwt. is asked. Thirteen bales of nice bright root realised 21s. per cwt. Another lot of 148 bales was taken out without mention of price.

DRAGON'S-BLOOD shows no alteration in price, but remains in fair demand. At auction 48 cases were offered, of which 16 sold at 4l. 5s. for damp saucers of dull colour from Singapore. This lot was offered without reserve, and showed no change in price. Another parcel of fairly bright, but seedy, lump realised from 6l. 2s. 6d. to 6l. 5s. per cwt. For very common brickly lump a bid of 32s. was declined.

ELEMI.—Twenty-five cases of good pale gum from Singapore, good flavour, were bought in at 30s. per cwt.

ERGOT OF RYE.—Several lots were sold to-day, mostly without reserve, from 5d. to 6½d. being paid for ordinary wormy to fair *Spanish*, and 6½d. for medium *Russian*. Other lots were bought in at 8d. to 10d. per lb., nominally. The market is dull.

GALANGAL.—Twenty bales of fair quality were bought in to-day at 20s. 6d. per cwt.

GAMBOGE.—Very firmly held. Of 23 cases offered, 12 sold, at 9l. per cwt. for good but blocky pipe of fair fracture, and from 7l. 15s. to 8l. 17s. 6d. for low damaged damp to good but damp pickings. Good pipe, damp but of orange fracture, is held for 10l. per cwt.

GINGER.—*Cochin* has been in demand at higher rates. Considerable quantities have been sold at 37s. to 38s. per cwt. for fair washed rough on the spot.

GUM ACACIA.—Several parcels of *Soudan* sorts were offered for sale to-day, but only a few bales sold, fair greyish, rather dusty sorts, at 55s. per cwt. Seven bags of *Aden* gum sold at 22s. per cwt. for coarse siftings. For brown glassy drop 45s. per cwt. is the price.

GUM AMMONIACUM.—Steady. For 4 cases fair, partly pale, detached almonds, partly blocky, 47s. 6d. is required. Two cases old blocky grey, partly loose almonds, from Bombay, sold without reserve at 30s. per lb.

GUM MASTICH.—Small sales of fine pale drop have been made at 1s. 8d. per lb. showing an easier market.

HONEY.—Rather steady; of *Jamaican* honey 6 packages out of 32 offered sold at 25s. for fairly bright clean candied. Six cases dull thick *Australian* realised 20s., subject to approval; and 25 cases *Californian* clean pale to yellow liquid, also subject to approval, at from 28s. to 28s. 6d. per cwt. Pale candied *Chilian* was bought in at 42s. to 45s. per cwt.

INSECT-FLOWERS remain extremely firm, and the Trieste prices are fully as high as they were last week. At auction to-day, 20 bales of fair, somewhat stalky open flowers were bought in at 90s.; the limit was 85s., and a bid of 80s. per cwt. was rejected. Four kegs of common powder sold without reserve at 34s. per cwt.

IPECACUANHA.—*Brazilian* root is firmly held, and, although selling irregularly, realised an average advance of 1d. to 2d. to-day, 18 bales out of 60 offered selling at 5s. 5d. to 5s. 7d. per lb. for good stout sound to slightly damaged root. Dust realised 1s. 2d. per lb. Of *Carthagena* ipecacuanha 2 sold at steady prices—viz., 4s. 1d. to 4s. 2d. per lb. for good stout but damaged root. A bid of 4s. per lb. for a quantity was refused. One case of 140 lbs. fair Singapore ipecacuanha, rather mouldy, was bought in at 6s. 10d. A bid of 5s. 10d. per lb. is to be submitted for it.

JABORANDI.—During the year from July 1, 1894, to June 30, 1895, the exports of Jaborandi-leaves from Maranham, in Brazil, amounted to 7½ tons, valued at 682l. In the year 1893-4 the exports were 41 tons, valued at 2,971l.

JALAP has a decidedly easier tendency. Of 35 packages offered at sale to-day, a few sold at 8d. per lb. for small to medium, rather pale small *Vera Cruz* mixed. Another lot is limited at 8½d. per lb. From America the quotations come lower—viz., 7d. c.i.f. for fair quality.

KINO.—Good *Cochin* kino is still being offered at 13s. 6d. per lb. Perhaps a trifle less would be accepted.

KOLA.—Steady. Over 40 packages were offered, but only 5 bags of very grey kolas, imported *via* Lisbon, sold at 7d. per lb. For fair quality from 9d. to 10d. per lb. is asked.

LIQUORICE.—Root is very slow of sale—fair decorticated Persian, 20s. per cwt.; rough, 7s. 6d. to 10s. per cwt. At auction to-day 46 bags were limited at the last-named figure, a bid of 8s. per cwt. being refused.

MENTHOL.—Quiet, and still tending easier. Holders of native brands have difficulty in selling at 13s. 6d. per lb. Three cases of Cocking's menthol were held to day at 16s. per lb.

MUSK.—Scarcely any *Tonquin* pod-musk was offered at auction to-day, and nothing was sold publicly. *Nepaul* grain-musk was bought in at 42s. per oz., and 26½ oz. hairy *Cabardine* sold cheaply at 15s. per oz.

MYRRH remains very quiet. At auction to-day a few bales of ordinary dark *Aden* sorts brought 55s. per cwt.

NUX VOMICA remains very low in price. Thirty-eight bags fair small to medium pale seed realised 6s. per cwt. while a parcel of 547 bags from Madras and Calcutta was bought in at 4s. 6d. per cwt.

OIL (CASTOR).—Rather dearer. There is very little fine quality oil offering, and quotation for first pressings is from 3d. to 3½d., while for seconds from 2½d. to 2¾d. is asked; 30 cases yellow *Italian* castor oil were shown at auction: they are held for 3½d.

OIL (COD-LIVER).—The London market, although at the beginning of the week it showed perhaps a momentary trace of lessened firmness, has since become exceedingly brisk again. About 500 barrels of old non-congealing *Norwegian* oil have been cleared at prices ranging from 175s. up to 190s. per barrel, on the spot, and we hear that some business in new oil has been done at 210s. c.i.f. The majority of the manufacturers' agents, however, refuse to quote, and those who do name 220s. as the lowest price for fine quality. Mail reports, dated February 15, state that the average quality of the fish this year is still, worse than that of last year, the livers yielding only 25 per cent. of their weight in oil, against 33 per cent. in 1895. There are

few fishermen out in the Lofoden, and fish are scarce everywhere except in a few of the eastern districts.

OILS (ESSENTIAL).—Two cases, described as *Cinnamon-bark oil* of first quality, sold to-day at 7d. per cz.—an exceptionally low figure, if the statement in the catalogue be true. Another parcel of two cases fair cinnamon oil was priced at 8d. per cz. Japanese *Peppermint oil* is fully 1s. lower; twenty cases, guaranteed to contain over 40 percent. of menthol, sold without reserve at auction at 6s. to 6s. 3d. per lb. The oil was described as "pure oleum mentha piperita" (*sic*!). For a small parcel of *Cajuput oil* from Amsterdam 2s. 6d. per bottle is required, and for three coppers of G. Hamnett's oil of *Sweet orange* 7s. 6d. per lb. (a bid of 5s. 3d. was refused for this lot). Various parcels of *Eucalyptus oil* were sold:—Four cases "Eagle" brand at 1s. 8d. (subject) and 1s. 9d. per lb., 2 cases "P.B." at 1s. 6d. per lb., 11 cases "Padlock" at 10d. per lb. Twenty cases Amygdalina oil ("Stockrider" brand) in 4-oz. bottles, were again bought in at 50s. per gross. *Star anise oil* is easier; 9s. 9d. per lb. would have been accepted for 2 cases shown at auction to-day. For arrival 10s. per lb. c.i.f., present shipment, is still asked. *Citronella oil* 2s. per lb. on the spot, or 1s. 9d. per lb. c.i.f. for June shipment. *Lemongrass oil* tending a little firmer: spot 2½d. per oz. asked; for shipment 2½d. c.i.f. per oz. for near-at-hand, and 2½d. per oz. c.i.f. for distant shipment. *Cassia oil* is quiet: on the spot 8s. 6d. per lb. is asked for 70 per cent. oil. At auction two following parcels were shown:—45 per cent. oil, 5s. 2d. asked, 55 per cent. 6s. 6d. per lb. asked. American *Peppermint oil* tending slightly easier. HGH has been sold on the spot at 9s. 9d. per lb.

OPIUM.—The London market has become much firmer during the past two days, in sympathy with the news from Smyrna. A fair business has been done in manufacturing-opium at an advance of about 6d. per lb., 8s. 6d. having been realised by stuff which recently offered at 7s. 9d. There has been no business worth speaking of in *Druggists'* kinds, but for good quality 8s. 9d. to 9s. is now asked. *Soft-shipping* has sold to some extent up to 13s. for fine, and *Persian* at 13s. per lb. for fine bricks.

ORRIS.—Quiet; 14 bags fair to good pale *Florentine* were bought in at 75s. to 90s. per cwt.

PILOCARPINE.—Tending rather firmer, but manufacturers still quote 5s. per gramme. From another source the quotation is 145s. 6d. per cz.

QUASSIA.—Firmly held at 4l. 5s. Fine kiln-dried chips are worth about 11l. per ton.

QUICKSILVER.—Quiet, at 7l. 2s. 6d. from the importers, and at 7l. 2s. per bottle in second hand.

QUILLATA.—Five tons sold to-day at 12l. 10s. per ton.

QUININE.—At auction to-day 26 500-oz. cases of Imperial quinine in bulk were bought in at 13½d. per oz. Privately the market has been extremely quiet, and there are sellers of German bulk at 13½d.

RHUBARB is firm, and the few lots sold to-day (11 cases out of 186 offered) realised very full prices:—*Shensi*: rough-coated, small to medium, flat and round mixed, good pinky fracture, 1s. 10d.; bold flat and pinky fracture, 1s. 2d. *Canton*: fine flat, medium to good fracture, 1s. 2d. to 1s. 3d.; medium round, good fracture, 1s. 1d. per lb. *High-dried*: wormy, common coat, round, 4d. per lb.

SAFFRON.—Quiet at unchanged prices, from 26s. to 28s. 6d. per lb. being asked for fine to best *Valencia*, and 24s. 6d. to 25s. for ordinary quality.

SARSAPARILLA.—*Grey Jamaican* root remains in good demand; 28 bales damaged sold to-day at from 1s. to 1s. 4d. per lb. *Honduras* was bought in at 1s. 3d. per lb. Eleven packages *Lima-Jamaica* sold at 12½d. per lb. for sound and 11d. to 11½d. per lb. for damaged quality; and 5 bales damaged *Guayaquil* at 11½d. to 12d. per lb.

SEEDS (VARIOUS).—Among the seeds offered to auction to-day were 5 bales of *Stavesacre* fair quality, which were bought in at 95s. per cwt. Two cases *Jambul seed* were bought in at 1s. per lb., and a bag of *Strophanthus* at 2s. 6d. per lb. *Star anise* sold at 90s. per cwt. Of *Spanish anise* 15 bags fair quality realised 26s. per cwt. Ten bags *Anatto seed* from Madras were bought in at the high figure of 10d. per lb.

SENNA.—The 251 packages of *Tinnevely* leaves offered at to-day's auctions were mostly sold at decidedly higher prices. Good to bright green leaves brought from 3½d. to 4½d., medium greenish to dull mixed from 2½d. down to 1½d., and ordinary dark yellowish from 1½d. down to 1d. per lb. Good *Alexandrian* leaves sold at 11d. per lb., common at 1½d. per lb.

SHELLAC.—Dearer all round. At auction *Orange lac* realised an advance of from 2s. to 3s. per lb., and *Button lac* was also dearer.

SPONGES (TURKEY) sold to-day at from 3l. to 6l. 7s. 6d. per case, while for large sponges, 34 to 36 to the case, the price was 9l. 10s.; and from 62 to 69 per case, from 8l. 2s. 6d. to 9l. 5s. per case.

SQUILL.—Five bags fair quality sold at 2d. per lb. to-day. Good was bought in at 4d. per lb.

TONCA-BEANS.—Six cases dark partly mouldy and wormy *Para* beans realised 5½d. to 6½d. per lb. to-day. Fair quality was bought in at 1s. 11d.; fine at 4s. 6d. per lb.

TRAGACANTH.—Good and fine qualities are neglected, firsts at 14l. 15s. to 15l.; seconds at 13l. to 14s. 10s. per cwt. In common kinds however there has been a steady trade at high prices. Thirds *Smyrna* tragacanth have been sold at 9l. 10s., and for firsts 12l. would be taken.

VANILLA.—A fair quantity offered to-day, but there were few buyers, and only a small percentage sold, at a decline of about 1s. per lb.—good to fine, 6½ to 9½ inches, 26s. to 32s.; fair chocolate, 4 to 7½ inches, 23s. to 25s.; ordinary brown, 14s. to 19s. per lb.

WAX (BEES').—Very firm, and in good demand, *Jamaican* being about 5s. higher; 8l. 5s. was paid to-day for 3 barrels of good red quality. For fair to good *Australian* wax from 7l. to 7l. 15s. was obtained, which is also dearer. *Madagascar* sold at 6l. 17s. 6d., *Zanzibar* at 6l. 10s. to 6l. 17s. 6d. and ordinary dull bleached *Madras* at 6l. 5s. per cwt., while fine bright yellow *Madras* was bought in at 7l. For fair grey *Calcutta* bleached 6l. 10s. is the price. Five cases fair pale bleached *Mexican* sold cheaply at 6l. 17s. 6d. per cwt.

WAX (JAPAN) remains firm. It is said that 34s. 6d. has been paid to-day for good pale squares.

Heavy Chemicals.

(Where no prices are quoted the figures given in our table of January 4 still hold good)

The current demand for *Bleaching-powder* and *Soda crystals* is fairly heavy, and *Caustic soda* also continues to move steadily at unchanged rates. *Barium* compounds still continue in good request; the *Chloride* is, however, perhaps a shade easier. *Recovered sulphur* remains firm, *South Durham salt* brisk and steady. *Acetates* rather weak, and prices have a lower tendency. *Saltcake*, quiet. *Chlorate of Potash* keeps very steady, value, spot and forward, being from 4½d. to 4¾d. per lb. *Yellow prussiate of potash* has a slightly upward tendency, makers being well sold forward. *Green copperas* in fair request, both for best Lancashire and Welsh makes. *Sulphate of ammonia* steadier. Present values: *Leith*, 8l. 9s. 6d. to 8l. 10s.; *Hull*, 8l. 10s.; *Beckton*, or *Beckton terms*, 8l. 7s. 6d. Exports from *Leith* last week were heavier, and amounted to 894 tons. The *Tar* products market is in a fairly firm condition. *Aniline oil* and *salt* are both rather scarce, and somewhat difficult to obtain, even at good prices. *Benzol* quiet, 90 per cent., 2s.; 50 per cent., 1s. 8d. The demand for *Carbolic acid*, both crude and crystals, is heavy, and makers are not without a goodly number of orders on hand. *Pitch* easier. *Anthracene*, both A and B grades, firm. *Naphtha* steady. *Miscible wood-naphtha* has advanced to about 3s. 6d. per gallon. *Solvent wood-naphtha*, however, is a little easier. *Arsenic* continues very steady, and *Sulphate of copper* maintains a firm tone, a good business being done. *Hyposulphite of soda* is steady.

The Liverpool Drug-market.

Our Liverpool correspondent, writing on February 19, says that *Gum acacia* sorts have been in a little more request, and although only a moderate business has been reported at previous rates, more interest is again being shown in the

article. Other kinds are steady without much business passing. *Kola nuts* have been arriving somewhat freely, but have found ready buyers, one line of 56 barrels fair to middling quality selling at $4\frac{1}{2}$ d. per lb., while fifteen bags fine dry realised 7d. per lb.; fresh are held for about 9d. per lb. *Castor oil* is steady at $2\frac{7}{10}$ d. for good seconds Calcutta, and $2\frac{3}{4}$ d. to $2\frac{7}{10}$ d. for first-pressure French; Madras is in scanty supply at $2\frac{3}{4}$ d. per lb. *Beeswax* is well inquired for, and sales of *Chilian* have been made at 7l. 7s. 6d. for yellow and grey; *Italian* and *African* are unchanged at late figures. *Canary-seed* is not quotably altered, but is firmly held. Of *African ginger* considerable sales have been made up to 22s. 3d. for old stock, and better prices are being asked, to arrive, for the new. *Sulphate of copper* is very firm at 16l. 15s. to 17l. *Cream of tartar* presents no fresh features of interest, the value of first white being still 105s. to 106s. per cwt. There has been a further movement in *Chilian honey* during the week, but values are unaltered. *Potashes* remain at 21s. 6d. for pots, and 37s. 6d. for pearls. *Chilian anise* is in small supply at 22s. 6d. per cwt., and 25s. is asked for *Turkish*. *Powdered white arsenic* is very scarce, and the limited quantity available is held for 20l. per ton net. *Irish moss* is selling at 5l. 10s. to 6l. 5s. for common grades; medium and fine are scarce. *Turpentine* is the shade in sellers' favour at 21s. 6d. per cwt.

The Hamburg Drug-market.

Our correspondent writes on February 18:—Our market has been very quiet last week, and without animation. Only *Cod-liver oil* shows a brisk trade at advancing prices: 1895 non-congealing oil is quoted to-day 175m.; 1896, very scarce, at 190m. to 195m. per barrel. *Arsenic* is unaltered, at 45m. to 46m. per 100 kilos. (white lump). *Acid (carbolic)*, 40 per cent. 160m. to 164m. per 100 kilos. *Agar-Agar* is very firm, at 230m. per 100 kilos., but not much doing. *Balsam Peru* quiet, at $17\frac{1}{2}$ m. per kilo. *Camphor (refined)* not much doing at present; the market is quiet at 460m. to 455m. per 100 kilos. *Cascara sagrada* quiet: the price varies, according to quality, from 42m. to 44m. per 100 kilos. *Ergot of rye* quiet: best Russian, 105m. to 100m.; German, 105m. to 103m.; Spanish, 135m. to 133m. per 100 kilos. *Glycerine* remains firm: 23° double distilled, $122\frac{1}{2}$ m.; 23° refined, $112\frac{1}{2}$ m. per 100 kilos. *Menthol* is dull at 29m. per kilo. *Oils (essential)* do not show any considerable change in prices, with the exception of Japanese *Peppermint oil*, which has dropped to 11m. for natural and to $16\frac{1}{2}$ m. per kilo. for 40 per cent.; HGH American, $9\frac{1}{2}$ m. to $9\frac{1}{4}$ m. per lb. *Clove oil*, 4m. to 4.50m. per kilo. *Opium* is unaltered, at $17\frac{1}{2}$ m. to 18m. per kilo. *Quinine* neglected: prices vary from 39m. to 40m. per kilo. *Sugar of milk*, fine pure quality, quoted 145m. to 150m. per 100 kilos. (powder). *Vanilla* is very firm; the supplies remain only small, and meet readily with buyers. *Japan wax* is getting dearer: to-day's quotation is 70m. to 73m. per 100 kilos. *Sulphate of copper* is quiet: German brands are offering at 31m. to $31\frac{1}{2}$ m. per 100 kilos. *Honey* is quiet: Valparaiso, Pile II., 22m. to $22\frac{1}{2}$ m.; Pile III., 23m. to $23\frac{1}{2}$ m. per 100 kilos.; Californian firm, at 57m. to 58m. per 100 kilos. excl. duty.

Business Changes.

Notices of changes in the retail-trade, and opening of new businesses, are inserted in this section, free of charge, if properly authenticated.

MR. J. STEVENS, of New Brompton, Kent, has opened a branch at Luton Road, Chatham.

THE postal address of Mr. H. E. Firman is 3 Selhurst Road, South Norwood, S.E., not Croydon as reported in last week's issue.

MR. E. J. BISHOP, of Tontine Street, Folkestone, has sold his branch-business in Sandgate Road to Mr. D. L. Lewis, of Ealing, London, W.

MR. C. C. ROSS has sold his business of chemist and druggist and mineral-water manufacturer, at 71 Bohemia Road, Hastings, to Mr. T. W. Jones.

The London Dock Charges.

INDIGNATION MEETING OF BROKERS AND MERCHANTS.

THE London produce dealers and brokers have been considerably excited within the last fortnight by a proposed "deal" between the Dock Company on the one, and the Steamship Companies bringing goods into London on the other, hand, the effect of which would be to land all merchandise carried to the docks by the vessels of those companies upon the dock quay, where the goods would be sorted by the dock officials and by them delivered to the various private wharves and other parties concerned. Hitherto it has been the custom that merchandise intended for warehousing at the many private wharves who are in competition with the Dock Companies is discharged into the craft of those wharves overside of the vessels, and straightway taken to the respective warehouses. It appears that an Act of Parliament, passed many years ago, established the right of free access to the whole of the river, and the docks are therefore powerless to prevent their competitors' barges from approaching the vessels moored alongside the quay and claiming their merchandise. It hardly needs mentioning, however, that they look with jealous eyes upon the rivals who thus carry off what the docks regard as their lawful prey before the very eyes of the dock officials, and the projected "agreement" with the Steamship Companies was intended to put a spoke in the wheel of the private traders. As it happens, many of the wharves possess special facilities for handling and warehousing certain descriptions of goods, and, taken all round, their charges are considerably lower than the Dock Company's tariff, which has long been a scandal to the premier port of the world and one of the greatest dangers to its commercial prosperity. It was but natural, therefore, that

THE DEEP-ROOTED DISLIKE AND DISTRUST

(to use no stronger terms) of the Dock Company and all its works smouldering in the breast of the average London merchant should have burst into flame at this last proposal to increase the burdens laid upon the shoulders of the mercantile community for the benefit of an over-capitalised and over-directed organisation. For although increased despatch was the ostensible reason given for the proposed agreement, the Dock Company let it be known that a charge of from 2s. to 3s. 6d. per ton handling and sorting would be levied upon goods directed to be handed over to the private wharves, and as there are many kinds of merchandise which can only be properly handled at those wharves, the innovation would clearly amount to an additional tax upon all such goods. Petitions against the proposed measure, placed for signature in the Commercial Sale Rooms, the Baltic and other mercantile gathering places, were crowded within a couple of days with the signatures of many hundred business firms, and on Tuesday an indignation meeting of merchants and brokers was held at the Cannon Street Hotel to back the petitions. The London mercantile community are not easily stirred to action, but Tuesday's gathering testified to the deepness of their feeling on this question. Sir Albert Rolit, M.P., a man after the City merchant's own heart, took the chair, and when the hour fixed for the commencement of the gathering had struck there was no standing room left in the great hall. Even the balconies were filled and it seemed as though one might reasonably expect to see portly city merchants attempt to climb the pillars in order to get a look at the proceedings.

SIR ALBERT DID NOT SPARE THE DOCK COMPANIES.

He had invited the directors to be present to defend themselves, but the gallant colonels and other gentlemen who manage the docks discreetly declined to face the music. They sent a letter, however, to the effect that they would be glad to talk the matter over at Dock House with those who felt aggrieved, and they also explained that they did not mean ill, that "considerable misapprehension" existed about the effect of the proposed arrangement, and, in short, that the extra charges would not be at all so heavy as people thought. But the meeting refused to be placated, and unkindly laughed at the letter. They knew too much of the dock

companies and their ways. "Naturam expellas furca, tamen usque recurret," as Horace has it—in other words, "Can a dock-director change his spots?" And so Sir Albert was cheered to the echo when, in crisp, clear sentences, he laid it down that there were already sufficient obstacles to the trade of the Port of London, that competing ports offered facilities which were not given here, that reduction rather than increase of charges should be the watchword, that "all changes in commercial life are more or less evil" (an assertion that made the writer look up to see whether the speaker really meant it), that there was a considerable doubt in his (Sir Albert's) mind whether the proposed agreement were not illegal, and that it would be unwise to place greater power over labour in the hands of a body which had not always maintained such peaceful relations with its employés as the private wharfingers had done. Let the wharfingers, lightermen, merchants, and brokers of London, concluded the Chairman, rally to the old cry, "Our craft is in danger." (N.B.—The word "craft" not to be taken in the meaning usually attached to it by the wharfinger.)

Mr. Alban Gibbs, M.P., followed, and endorsed the Chairman's statement with regard to the Act of Parliament, which compels the Dock Company to give free access to the water, and the consequent doubtful legality of the proposed agreement. The threatened charges would drive away the mills and factories that have grown up along the Thames, relying on cheap supply of raw material.

"CONSIDER THE MILLS ON THE RIVER,"

continued Mr. Gibbs—"how they groan," our representative expected him to add, but he forbore, and instead asked who would give them compensation if they were driven away. Mr. Gibbs would have gone on at greater length, had not his Country claimed him. "I am wanted in the House of Commons just now," he let fall in a casual way; and so he finished by moving a strongly-worded resolution of protest against the proposed charges. This was seconded by Mr. Keswick, of Matheson & Co., and supported by Sir Reginald Hanson, M.P., who declared that on some of the produce handled by his firm the proposed charges would decrease the profit by from 10 to 20 per cent., and by Mr. Alderman Ritchie, who gave instances of the expensiveness of London compared with other ports. His firm, he said, had a branch in Hamburg, and in that port the charges on jute were only half of those levied in London.

THEN FOLLOWED MR. STEPHEN RALLI

with an excellent speech, the brightness of which was rather accentuated than diminished by the speaker's Oriental accent. The Dock Company's circular reminded him of the fifties and sixties, long before the Suez Canal was made, and when all goods came to London. At that time a few shillings a ton would have made no difference. Now the case was altered. London was now the dearest and, he believed, the slowest port in the kingdom. Amalgamation, consolidation, reduction of capital to the real value of the undertaking—that should be the motto of the Dock Company. His firm imported shellac from India. They had tried to warehouse it at the docks, but had to return to private warehouses because the goods were unskilfully worked at the docks. There was even yet time to preserve London's pre-eminence, but the Dock Company were going altogether the wrong way at present.

Mr. Martin Smith came next, and to him succeeded Mr. Geo. Rouse, who brought down the room with the Carlylean invective of his expressions. The Dock Company should be told they were the servants, not the masters, of the traders. Liverpool, Hamburg, Antwerp had modernised their appliances; London lagged behind, had not faced the new requirements created by the Suez Canal. Some time ago his firm wanted a parcel of cotton weighed. The Dock Company's charge was 3½d. per bala. Messrs. Rouse then had the whole lot

WEIGHED IN HAMBURG AT A PENNY A BALE,

including agent's commission. For years the Docks had charged 4s. 3d. per ton for delivering goods from their warehouses by water and 1s. 6d. per ton for delivering them by land. Where was the difference between dropping them out of one window into a cart and out of another into a barge?

"I tell you, gentlemen, there never was a bigger burglary than this Dock business." The Muswell Hill business was no worse than the Dock Company's practices. Last year 15,000 bales of cotton went from China to the Continent instead of to England on account of the London dock charges. What was wanted was a Dock Trust, like that in Liverpool, where the profits went to the town. The semi-military management of Colonel Martindale and Colonel Duplat-Taylor should be abolished and the docks sold for what they would fetch. "Let us stand up and say we will not stand a military despotism," was Mr. Rouse's peroration. Not a very discreet speech certainly, probably not a wise one, but "Jack Burns" and "Mr. Alderman" Tillett never found a more enthusiastic and responsive audience among the dockers on strike than Mr. Rouse did in this gathering of tall-hatted, black-coated City merchants. The words of Gonzalo:—

My lord Sebastian,
The truth you speak doth lack some gentleness

might well have been applied to the oration, still, it was only letting off the superfluous steam. Those who have the management of the negotiations with the Dock Company can well afford to let the irregular auxiliaries of the movement set forth their unauthorised programmes. Even a little over-plain speaking will do no harm. The merchants have a long account to settle with the Dock Company, and it is to be hoped that they will utilise the force now generated to clip the monster's claws.

Medical Gleanings.

GILBERT'S SYRUP

Hydrarg. biniodidi	gr. ss.
Potassii iodidi	3ij.
Syr. zingiberis	3ii.
Aq. dest.	3ij.

M.

Dose : 5 to 10 drops for a child six months old in hereditary syphilis.

—*Med. Times.*

SCOPOLAMINE IN INSOMNIA.

OBSERVATIONS made on patients suffering from acute and chronic mental derangement at the St. Petersburg military hospital showed that when scopolamine hydrobromate was given in doses of 0.0002 to 0.0004 gramme hypodermically the effect of it was felt by the patient after a lapse of five to fifteen minutes as a drowsiness which rapidly developed into a deep and quiet sleep. This was accompanied by considerable dilation of the pupils, and also by a fuller and slower pulse. The slumber lasted from three to ten hours, according to the dose. On awaking the calming influence still lasted, though no drowsiness was to be observed. The effect of scopolamine proved strongest in the maniacally excited and in patients suffering from acute hallucinations; but larger doses (0.0015 gramme) were quite useless in cases of delirium tremens. These observations suggest that scopolamine is identical with chemically pure hyoscine.

COMPRESSED DRUGS.—The *British Medical Journal's* correspondent with the Ashanti expedition writes from Prahsu:—"A word about the tabloids employed at the front. There is no question that it is an elegant and efficient method of administration. The disadvantages are that they chip and break up as soon as some are taken out of the bottle, and space is given for the remaining ones to shake about; another is the latent suspicion that they are not soluble, and pass through the system unchanged. They should be made—as one firm asserts—in such a way that on coming into contact with moisture they should at once begin to disintegrate or crumble to powder, thus bringing the drug into the best possible condition for rapid absorption by the system. The first objection can be met by packing the vacant space with cotton-wool, and this is so simple that it is not advisable to increase the hardness of the tabloid at the risk of diminishing its solubility."



Memoranda for Correspondents.

In letters for publication correspondents are requested to express their views as concisely as possible.

Correspondents should write on one side of the paper only, and devote a separate piece of paper to each subject of inquiry.

The name and address of the writer should accompany all communications, with, if desired, a distinctive nom-de-plume.

Anti-cutting Schemes.

SIR,—We are quite at one with Mr. T. Lynch in his denunciation of the manifest absurdity of makers advertising the price of a *spécialité* at one figure, and at the same time notifying the trade that it may be sold at a "minimum cutting-price" of so much under that figure.

In our opinion the cutting-difficulty will be settled somewhat on the following lines:—

1. Advertised price to be in all cases the selling price.
2. Maker's price to all comers (who must sign an agreement that the preparation shall not be sold retail at less than advertised price) to be high—say, 10s. for 1s. articles; 24s. for 2s. 6d. articles.
3. Makers to grant *bona-fide* wholesale dealers a yearly bonus of 7½ per cent on total sales.
4. Wholesale dealer to obtain a signed agreement from every customer not to retail below advertised price.

If ten of the large proprietors—say, Beecham, B. W. & Co., Vinolia, Holloway, Fenning, Elliman, Keating, Seigels, Cockle, and Norton—would conjointly signify their intention of conducting their businesses on these lines in the future, the knell of cutting would be sounded, and, directly and indirectly, each section of the whole trade would be benefited.

Yours faithfully,

Brighouse, February 11. S. CARDWELL & SON.

SIR,—As one who has done his level best to stop the cutting of prices during the last twenty years, much to his own pecuniary loss, I need hardly say I approve the objects of the new society and wish them every success. It is therefore with regret that I venture to criticise their doings at the last meeting, held on February 12. From your report of this meeting I notice the Secretary is empowered to correspond with the Grocers' Federation in order to secure their co-operation. This is a very retrograde step, and one that calls for the strongest condemnation. I am of opinion that the sale of all medicines should, if possible, be secured to the registered chemist, whether such medicines be proprietary or not. Of course we have no legal right to this, but we have certainly a moral right, and now would be a suitable time to assert it, and to restrict the trade in proprietary medicines to registered chemists only. I certainly do not think it dignified to arrange terms with men that we do not admit have any right to be in our trade at all; in fact, it would be tantamount to admitting their equal rights in the drug trade with ourselves. Of course this applies to medicines only, and in regard to other goods, such as beef extract, foods, and other similar articles, their co-operation would be most valuable.

Yours faithfully,

Liverpool, February 18. WALTER A. GRACE.

SIR,—To prevent as far as possible the insane cutting of proprietary articles, we have decided to materially increase our prices to the trade for those manufactured by ourselves, as we see no necessity for giving to the public the profit that would otherwise fall to the share of the retailer. Those who adopt the cutting principle do not do so in the public interest, but to draw customers to their so-called stores for their own selfish ends, and in so doing are indifferent as to how many they force into the Bankruptcy Court, or who sinks so long as they swim. We think, too, that the trade would do well not to support those houses who, not content

with their wholesale trade, open shops in different neighbourhoods on the cutting principle. It was bad enough when they did so on fair lines, it is infinitely worse now. There is no doubt purchasers would pay full prices without question, were it not for the action of the stores in making leading articles of those goods the retail prices of which are advertised.

Yours truly,

LIVE AND LET LIVE. (6/21.)

SIR,—I have read with great interest the proposals to mitigate the insane system of cutting the prices of proprietary medicines. It does seem absurd to bind retailers not to sell a 2s. 9d. article for less than 2s. 6d. If any method is adopted, let the prices be maintained—viz., 1s. 1½d. or 2s. 9d., as the case may be. Mr. Lynch in your last issue seems to me to show the solution of the difficulty. It is time something were done, as the system of substitution is growing fast, especially in the so-called stores or cheap shops.

Yours, &c.,

Inverness, February 11.

ANGOSTURA. (7/69.)

Extra Charge for Night-work.

SIR,—Referring to the letter of Mr. H. S. Naftel in this week's CHEMIST AND DRUGGIST, I beg to suggest, as a remedy for the night-work of which he so justly complains, the adoption of a plan which succeeds well with me.

I circulate amongst my customers the following notice:—

NIGHT-DUTY.

A competent assistant is always on duty during the night, but our customers are earnestly requested to have recourse to us only in cases of emergency. An extra charge is made for retail or dispensing between the hours of 10 P.M. and 8 A.M.

We close at 9 P.M., but no extra charge is made till 10 P.M. After that hour the ordinary price is charged for medicines, with the addition of 5f., which is the perquisite of the assistant who is on duty.

I have heard of chemists charging double for night-work, but that is either too much or too little—too much on an outlay of 10f. and upwards, too little on small sums.

Physicians charge extra for night-work, and the City of Paris allows a fee to the pharmacien who is called up at night on the city service for poor people, besides paying for the medicines. With perhaps two or three exceptions, since July, 1893, the extra charge has been cheerfully paid. The assistant on night-duty being a qualified man, I have fixed a price which satisfies him, but which, of course, should vary in different houses according to the class of customers the chemist has to deal with.

Yours truly,

W. H. SWANN,
Pharmacien de 1^{re} Classe.

12 Rue Castiglione, Paris, February 10.

From the Riviera.

Mr. William Shepperson, of the Liquor Carnis Company, has been visiting the chemists on the Riviera. He wrote to us lately from San Remo stating that the weather throughout the winter had been perfect, and the visitors very numerous, but that it had been a bad season for dealers in physic. Doctors and chemists were both complaining. The season had, in fact, been too healthy. Mr. Shepperson, who has travelled in most of the countries of the world, says he has seen nowhere such natural beauty as on the Riviera. The pharmacies are very fine, and do a large business. At Monte Carlo, he says, he visited the grave of Mr. S. M. Burroughs. Palms were growing at each end of the grave, and in the centre were palms and Scotch heather in pots. It is a most lovely and quiet cemetery. Mr. Burroughs's memory, he adds, is cherished by a large circle of friends on the Riviera.

Can this be Capped?

SIR,—Will you, if possible, tell me through the reply column of your excellent paper if you know a case of any candidate having passed three Preliminary examinations of different Societies? I am a native of Tasmania, and previous to apprenticeship I passed the Victorian examination,

and was afterwards apprenticed at Hobart. Before registration I had to pass the Tasmanian Society's examination, and this year, coming to England to qualify, found that I should again have to undergo the Preliminary torture. Having successfully passed the recent examination, I think I must have established a record—hence the above inquiry.

Yours truly,
T. F. B. (9/11.)

[Our correspondent must have longed for federation in the completest sense.—ED. C. & D.]

The Irish Defeat.

SIR,—Referring to the recent decision of the Court of Queen's Bench, I would reiterate what I have again and again endeavoured, but without success, to impress upon the members of the Pharmaceutical Council—that the risk of being defeated was too heavy a stake for them to play for. Now that they have been defeated, the druggists have the right to demand that the Society will without delay take steps to set matters right. I understand that there is no appeal from the present decision, therefore the only alternative is that both pharmaceutical chemists and druggists make a united effort to at once have a Bill introduced into Parliament to amend the law, so that the legitimate firms who are "limited" may be allowed to trade, but which will prevent the country being flooded by bogus companies.

Yours truly,

Belfast, February 18.

SAMUEL GIBSON.

The Half-holiday.

11/34. *A Subscriber* would like to ascertain whether the Post Office allows the closing of a telegraph office at, say, 4 P.M. in any town where there is no other telegraph office.

Charging the Stamp.

Mr. M. J. Bentley, chemist, 136 Hanover Street, Sheffield, calls attention to the circumstance that the proprietors of the carbolic smoke-ball, who now have to stamp their article, have raised the wholesale price 12s. per doz., while the retail price remains as it was before. *Mr. Bentley* says he has been in the trade something like thirty-five years, and has not met with anything to equal this injustice.

DISPENSING NOTES.

Correspondents should consult "The Art of Dispensing" in regard to dispensing difficulties. Difficulties not explained therein may be sent to the Editor, who invites a general expression of opinion upon the under-mentioned topics.

Liq. Calc. in Prescriptions.

Lanolin.
Zinc ox.
Liq. calc., eq. pts.

(*Dr. Morris*, 8 Harley Street.)

This base and its compounds with ichthyol, &c., become "rotten" in mixing. Can they be dispensed without use of vaseline as a binder in order to make a presentable ointment or paste? C. (257/72.)

8/65. *A. G.*—Our opinion of the mixture containing, amongst other things, pot. iod., quin. sulph., and sp. æther. nit. is that it is thoroughly bad, and the prescriber should be told so.

6/60. *Gentian*—A reasonable price for the mixture would be 1s. 6d., but we know where you would get it for 9d. and for 3s. 6d.

2/4 *Curious*.—The mixture has a precipitate of alkaloidal and calcium salicylates. Half a drachm of acacia mucilage to each ounce of the mixture will improve it.

Illegible Prescriptions.

Subjoined are copies of Liverpool prescriptions sent to us by *Jasper* (7/15) and *Mr. Pierson*. We do not find them at all difficult reading, but we shall leave that to subscribers:—

By J. M. H. 9 x 11
Jasper

R. H. G. 9 x 11
no first name

P. L. 9 x 11
note 12
1 p. 11

Renderings should be sent to us on postcards.

3/71. *T. B.*—The mixture of cresylic acid and resin-oil should be emulsified with liquor sodæ—say 1 oz. of the latter to 5ij. ol. resinæ; to this add 5j. acid. cresylic. Shake, and make up to 3viij. with water.

8/5. *Aqua*—The mixture will contain a bulky deposit of iodo-hydrargyrate of quinine. Any dispenser who sent out the mixture clear must have filtered it off. It is a bad prescription, and the first dispenser should have asked the doctor to omit the quinine, giving it separately as cachets or powders.

15/43. *Chlorobrom.*—Use glycer. tragacanth to mass the guaiacol carbonate.

LEGAL QUERIES.

Immediate information on pharmaco-legal matters is available in "Pharmacy and Poison Laws of the United Kingdom," *Alpe's "Handy-book of Medicine-stamp Duty,"* and *THE CHEMISTS' AND DRUGGISTS' DIARY.*

6/1. *Curious*.—You are not at liberty to sell out single powders of your own manufacture unstamped if those powders are liable to medicine stamp duty when put up in a packet.

7/4. *Sulphur*.—You are probably safe in selling precipitated sulphur when milk of sulphur is asked for; and, if you defend yourself properly, you can generally win on lac sulphuris also in like circumstances. But this has not been the case invariably.

7/39. *Smith*.—The Registrar of Companies would be the proper person to take proceedings if a company did not make its usual return, but this would not affect the company's right to call itself a chemist. We are not aware that it would be an offence for a man to call himself "Limited" if he be not registered. We have not known any company registered to evade the Dentists Act. We cannot prophesy whether they would be allowed to do so.

8/47. *Nemo*.—We do not understand what you mean by "a curator appointed to look after a chemist's affairs." If he is an assistant engaged in the ordinary way he is subject to a month's notice in the absence of any specific stipulation.

4/41. *Hypo*.—If you give notice any time on March 5 your service is terminated when business hours are ended on April 5.

8/20. *C. M.*—We do not think it desirable to discuss in a journal the seidlitz-powder question while the appeal is pending. We may point out, however, in reply to the remarks you make, that if you wish to sell seidlitz-powders stronger or weaker than prescribed in the Pharmacopœia it is quite legal for you to do so, provided you clearly state the variation on the label.

16/62. *Error.*—There is no legal objection or disability, under the British pharmacy regulations, for an apprentice to be bound to you as an executor, only you had better have it made clear in writing that he and his guardians know your position in the business, or they might object afterwards that you had undertaken to teach a business which you did not know. "Pharmacy and Poison Laws" is 2s. 6d., post free 2s. 9d.

10/17. *Southerner.*—It is not usual for partners to draw interest on their capital if no provision is made to that effect in their deed of partnership.

12/9. *E. W.*—You have a legal right to terminate your engagement by a month's notice from any date. There is no rule that the notice must terminate on the date of the commencement of the service. This was decided in regard to a chemist's assistant in the case of *Broxham v. Wagstaff*, 5 Jur. 845.

11/21. *A. J. W.*—If you buy a business without any agreement on the point, your right to the day-book and ledger depends on whether you have bought the book-debts.

13/18. *J. J.*—We do not know on what point you want our advice. You cannot establish your claim in a court of law for medical or surgical attendance unless you are registered under the Medical Act. We think you would lose the action if Mr. B. were to sue you for the balance you hold. But we should hope the poor woman who was shot in the eye will be advised to insist on a great deal more compensation than she has had or seems likely to get.

12/69 (*Cumbrian*) and 66/15 (*Pills*).—It is illegal for others than pharmaceutical chemists to use the description "pharmacist." Many others describe their shops as pharmacies, and we think they can legally do this; but the right has never been tested in a law-court. You cannot get registration for any geographical term as a trade-mark.

MISCELLANEOUS INQUIRIES.

Back numbers containing formulæ, educational or other specific information can be obtained from the Publisher.

N.B.—All queries should be accompanied by the business card of a subscriber, or the address label from THE CHEMIST AND DRUGGIST wrapper. We destroy anonymous letters. We do not answer queries of the kind here dealt with by post. We ask that separate queries shall be written on separate sheets of paper.

253/52. *W. G. H.*—Transfer-ink for Patterns.—Try this:—

Amber resin	..	..	..	..	..	3j.
Sandarach	..	..	..	..	..	3j.
Spirit	..	..	..	..	..	3v.
Dissolve, strain, and add—						
Methyl violet	..	..	..	..	..	3j.
Spirit	..	..	..	..	..	3j.
Mix.						

4/22. *Llan.*—The Hair dye is a pyrogallic-acid one. Apparently your customer has applied it without washing the hair first. This should be done, and after the dye dries brilliantine should be used. If your customer objects to the washing you should make the dye spirituous—say, pyrogallic acid, 3j; water, 3j; S.V.R., 3j. Dissolve.

245/71. *S. C. N.* (Quebec) sends us a sample of a Preparation used for Cleaning Horses. It is claimed, he says, "that this oil will remove dandruff and dirt, leave the skin soft, white, and clean, will cure the worst case of mange in the world, keeps the hair soft and silky, will stop all irritation and rubbing, preventive against flies, destruction to lice, takes stains out of white horses, keeps black horses from fading out." We find the preparation to be a mixture of 1 part of rectified oil of tar with 7 parts of kerosene.

253/7. *Veritas.*—(1) There is something in your Powder for Cleaning Children's Heads which we cannot quite make out, but the chief constituents are dried carbonate of soda and powdered quassia. (2) The best preparation of stavesacre is the vinegar, 1 in 20, which is afterwards diluted to form a lotion, 1 oz. in 8 oz., with any perfume you like.

260/17. *Inquirer.*—Your "Very Popular Shampoo-powder" is nothing more nor less than Hudson's extract of soap—3vj. to a pint of water, and to retail at 2d. Marvellous!

5/28. *G. J.*—The pharmacopœial method for making Bismuth Citrate is wasteful and gives the objectionable product such as you send. See a paper on the subject by MacEwan in our first volume for 1886.

5/27. *Revy.*—Preservative for Sauces.—The following will give you a preparation like your sample:—Calcium sulphite, 3s.; malt vinegar, Oj. Dissolve.

11/26. *F. C.*—Jonathan Pereira was born at Shoreditch on May 22, 1804, and died on January 20, 1853.

6/32. *Old Subscriber.*—The Purgative Oil for Cattle of, which you send us a sample, seems to be:—

Ol. crotonis	..	..	..	..	..	5ss.
Tr. opti	..	..	..	..	..	5iss.
Ext. glycyrrh. liq.	..	..	..	..	..	5iij.
Ol. lini ad	..	..	..	..	..	3xx.

M.

Dose: For a calf a wineglassful, for a cow two or more.

261/57. *Burton.*—The Powder Used in Brewing is a mixture of dextrin 8 parts, calcium sulphite 1 part, and crystals of ferrous sulphate.

301/96. *Puff.*—The Violet powder which you send is a mixture of farina and French chalk, of each 8 parts, borax 1 part, scented faintly with lemon. Powdered boric acid is largely used as a Toilet-powder, and is what you mean.

263/9. *Vet.*—Calf powder for Diarrhœa, similar to your sample:—Mag. carb. levis 3vj.; pulv. rhei 3j.; pulv. glycyrrh. com. 3v.; pulv. zingib. com. 3j.; ferri carb. sacch. 3s. M.

261/64. *Pepsin.*—Rennet-powder is a mixture of salt and the crude rennet ferment, but how made we cannot say. You can buy it at about 10s. per lb. See DIARY, page 246.

119/28. *H. W.*—"Inch-of-candle Auction."—An auction which commenced by lighting a bit of candle an inch long. Whoever had made the last bid before the candle went out had the article knocked down to him. Such auctions have long been obsolete, but up to the end of last century they seem to have been very frequent, as the advertisements of auctions of drugs "for sale by the candle" at Garraway's Coffee-house in Cornhill, in copies of eighteenth-century City newspapers, show.

262/23. *Decon*.—Nervine balsam is the French *Baum Nerval*, viz.:—

Bals. toltutan.	..	..	..	..	5ij.
Camphor.	..	..	..	..	5j.
S.V.R.	..	..	..	..	3ss.

Dissolve and add to—

Ol. macidis.	..	..	..	..	3iv.
Medullæ boviæ.	..	..	..	..	3iv.

previously melted. Also add—

Ol. rosmarini	..	..	..	..	5ij.
Ol. caryophyllæ	..	..	..	..	5j.

Mix.

It is not possible for us to reply "this week" to queries received on Fridays, as yours was. See also reply to "Label Paste" (p. 238) in regard to this matter.

262/3. *Scotia*. (1) Foot-rot Paste:—

Cupri sulphat.	..	..	..	..	3iv.
Zinci sulphat.	..	..	..	..	3j.
Pulv. tragacanth. co.	..	..	..	..	5j.
Acid. carbolic.	..	..	..	..	5ij.
Mel. depurat.	..	..	..	..	3ij.
Aq. . . . .	..	..	..	..	q.s.

M. Ft. pasta.

(2) Nit ointment.—The safest preparation on the whole is one made from stavesacre, such as:—

Ol. staphisag.	..	..	..	..	3j.
Cera flavæ	..	..	..	..	3j.
Vaselin.	..	..	..	..	3vj.
Hyd. sulph. rub.	..	..	..	..	gr. x.
Ol. bergam.	..	..	..	..	mx.
Ol. citruam.	..	..	..	..	miij.
Ol. citronell.	..	..	..	..	miij.

Ft. ung.

262/54. *H. H. & S.*—Flux Used for the Metal Bismuth.—We presume that our correspondent means in separating the metal from the ore. The composition of the flux varies, but one consisting of sodium chloride 15 to 20, lime 5, fluor spar 5, and charcoal 30 is commonly employed. If iron is used instead of charcoal, sodium carbonate replaces the chloride. For the purification of bismuth see the B.P.

10/16. (*X. Y. Z.*) and 10/74 (*Tenax*) have wasted postcards on queries by excluding their names and addresses.

1/47. *New Subscriber*.—Egg-powder is a mixture of cornflour 4 parts and baking-powder 1 part, coloured with saffron, and flavoured with ratafia or lemon.

1/62. *Student*.—Chloralose.—Dr. E. H. Squibb sums up the knowledge of this remedy to date in the following paragraph which we quote from *Ephemeris* as being as succinct as anything we could say about it:—

Chloralose (anhydro-glucio-chloral) is still very largely used. Its principal usefulness is found in its hypnotic effects, and it has even been recommended as a sedative. It has also been effectively used in delirium tremens. Its one principal defect is the toxic symptoms too frequently noticed. The dose has to be considerably varied according to each individual patient. Dr. Rendu has even found as small a dose as 250 milligrammes (about 4 gr.) to produce alarming intoxication in a tuberculous patient. Other similar cases are now reported after such ordinary doses as 200 to 400 milligrammes (about 3 to 6 gr.). It has, however, evidently come to stay, but must be treated, as all potent remedies, with care and judgment.

1/52. *Veto*.—You will find all information regarding the Veterinary Curriculum and Examinations in the *C. & D.*, September 7, 1895. The pharmaceutical Preliminary examination is no longer accepted for veterinary purposes. You must write to one of the Veterinary Colleges, and not to the Royal College of Veterinary Surgeons, about this matter.

1/27. *J. B.*—The only economical way to renovate Gold-plating is to have it dipped in the electro-gold bath. This is entirely a metallurgical art, which we cannot spare the space to describe. It is possible to gold-plate an article without electrolysis, but it costs shillings where the latter costs pence.

280/61. *J. Taylor*.—(1) Ung. Capsici.—The formula in "Squire" is the B.P.C. one. You can make a red ointment, such as you describe, in the following manner:—

Capsicums	..	..	..	..	3viij.
Natal pepper	..	..	..	..	3iij.
A mixture of 3 parts methylated spirit					
and 1 part water	..	..	..	..	a sufficiency.
Lard	..	..	..	..	3xiij.
Yellow wax	..	..	..	..	3ij.

Brise the capsicums and damp with 10 oz. of the menstruum; cover, and allow to rest for a day; then pack in a percolator, and percolate slowly until 16 oz. of percolate is obtained. Evaporate this to 3 oz., and add gradually, and with constant stirring, the lard and wax, previously melted together. Mix thoroughly.

(2) There was no reply to the query.

1/49. *T. J. R.*—Cheap Cattle-condiment:—

Ground linseed-cake	..	..	..	..	1 cwt.
Locust meal	..	..	..	..	56 lbs.
Bran	..	..	..	..	40 lbs.
Common salt	..	..	..	..	2 lbs.
Sulphate of iron	..	..	..	..	1 lb.
Black-pepper gruffs	..	..	..	..	2 lbs.
Fenugreek	..	..	..	..	2 lbs.

Mix thoroughly.

237/60. *Origanum*.—Silver-plating Paste:—

Nitrate of silver	..	..	..	..	3ss.
Common salt	..	..	..	..	3ss.
Cyanide of potassium	..	..	..	..	3j.
Chalk	..	..	..	..	a sufficiency

Dissolve the silver nitrate in a pint of water, and add the salt dissolved in as much water. Mix the solutions, and collect the precipitate on a piece of cotton cloth. Transfer the moist precipitate to a mortar containing the cyanide (in powder), and dissolve by adding more water if necessary; then make the solution into a spreadable paste with prepared chalk.

To silver any tarnished article spread some of the paste upon the spot, and leave for a few hours; then brush it off. Repeat if necessary. The result is not so good as by electro-deposition, but home-made things are never so good as those produced by experts.

2/64. *Spes*.—Aniline Marking-ink.—The following is Mr. Robert Wright's formula:—

(No. 1.)

Aniline	..	..	..	..	5j.
Paratoluidine	..	..	..	..	gr. x.
Dilute hydrochloric acid	..	..	..	..	5ij.
Mucilage of acacia	..	..	..	..	5ij.

Dissolve the paratoluidine in the aniline, add the acid and the mucilage, and mix.

(No. 2)

Chloride of copper	..	..	..	..	3ij.
Chloride of sodium	..	..	..	..	3ss.
Chloride of ammonium	..	..	..	..	3j.
Chlorate of potassium	..	..	..	..	3j.
Distilled water	..	..	..	..	5vj.
Mucilage of acacia	..	..	..	..	5ij.

Boil the water, and dissolve the salts in it; add the mucilage, and mix.

For writing equal parts of each solution should be mixed immediately before use. The results are excellent. We have some writing done with the ink five years ago, which is as good to-day as it was then.

1/59. *Syrupus*.—Please write to the advertisers for particulars. Surely you would not like it if we invited our subscribers to discuss publicly whether your goods or your neighbour's are the better.

2/24. *Minor*.—Candidates for the Minor examination are required to be 21 years of age on the date that they are examined. If the examination commenced on, say, June 23, and a candidate was not 21 until July 1, it is possible that the Secretary would arrange for the candidate not to be examined until July 1.

2/56. *J. W. (Canada)*.—(1) What is the best way to get rid of the terpenes from Oil of Lemon? Well, that is one of those questions which cannot be answered in a paragraph; and if you were to put it in other ways—*e.g.*, How is terpeneless oil of lemon made, or how is citral prepared?—we could take you little nearer the truth, because manufacturers are exceedingly careful about keeping the information to themselves, or, rather, processes have been published which on trial are found not to yield the expected results, even on the experimental scale. What is required is to fix the citral and citronellol (the aldehydic constituents to which the odour of lemon oil is due). The aldehydes combine with sodium bisulphite, and if a hot solution of the latter is shaken with the oil it dissolves most of the citral, &c., leaving the terpenes unaffected. After separation remove the latter, decompose the aldehydic sodium sulphite carefully with alkali, and distil. That is a suggestion merely, but we do not suppose that you will make a fortune by it. The terpenes may be largely removed by careful distillation; below 180° C. almost 70 per cent. of the oil distils, but some of the aldehydes go over with the terpenes, although citral does not boil below 223° C. (2) There are no terpenes in ginger. We presume it is a Soluble Essence of Ginger you want to make. If so, mix 1 pint of tr. zingib. fort. with 1 oz. of mag. carb. levis, and in ten minutes add 1 pint of water. Shake well, and set aside for two days, occasionally shaking; then filter, and add 10 drops of oil of ginger to the filtrate.

2/65. *W. L. & Son* — Medicating Homœopathic Pilules.—The official directions are:—"In medicating pilules, a suitable quantity of them should be placed in a bottle, and the tincture with which they are to be saturated [it should be 20 o.p. spirit] should be poured over them in sufficient quantity to thoroughly moisten every one of them; and the regular admixture of the tincture and pilules should be ensured by repeatedly shaking, or, better still, by grasping the bottle firmly and giving the hand a rapid circular motion, holding the bottle first perpendicularly and then horizontally. The requisite quantity of tincture should be added in two equal portions, allowing an interval of twenty-four hours between. At the end of two days the pilules may be dried between sheets of filtering-paper, if necessary."

5/73. *Sang. Drac*.—You will find what you want in our last Educational number, September 7, 1895.

4/20. *F. J. F.*—As you do not say what kind of a metal-polish you want, we must refer you to the *C. & D.*, Nov. 16, 1895, page 743, and Nov. 30, page 810.

INFORMATION SUPPLIED.

Benzoated Lard.—In reply to your correspondent "Laboratory," page 207, he will find a convenient method of benzoating lard by making a concentrated tincture of benzoin, 4 oz. of the gum and methylated spirit to produce 8 oz.; macerate for seven or ten days, shaking occasionally, filter, and pour sufficient spirit on the residue in the filter to make up the 8 oz. Half-an-ounce of this to 1 lb. of lard makes a good article, and in making zinc ointment this method is expeditious. The lard is melted at a low temperature and the oxide of zinc added, and when cool enough add the concentrated tincture in above proportion. If the tincture is added to the lard before it has begun to cool the latter will show specks of the gum. It is now only requisite to stir the lard until the spatula will stand upright. The

Garman Pharmacopœia orders 1 per cent. of benzoic acid, but this does not produce an article having the aromatic odour of the gum. T. S. (1/46)

INFORMATION WANTED.

The Editor invites, on behalf of inquiring subscribers, postcard replies to the following:—

- 10/25. Who are the makers of Rack-a-Rock explosive?
- 6/40. Homer's Foot-rot Ointment: where obtainable, or what is it?
- 9/13. Sir F. Watson's wonderful eye-water: what is it, or where obtainable?
- 12/71. Black beer (not Dantzic): where obtainable in bulk?
- 12/4. Fow's cement: where obtainable?
- 12/28. *Antipyrin* would be glad to know what any of our readers would charge for allowing a junior assistant to dispense for a doctor two hours a day (six days per week). There is no special agreement as to the doctor buying his drugs, and his account at present is a small one.

Next Week.

Monday, February 24.

Society of Arts, John Street, Adelphi, W.C., at 8 P.M.
Cantor Lecture: "The Chemistry of certain Metals and their Compounds used in Building, and the Changes produced in them by Air, Moisture, and Noxious Gases, &c.," by Professor J. M. Thomson, F.R.S.E.

Tuesday, February 25.

Royal Photographic Society, 12 Hanover Square, W., at 8 P.M.
"The Stereoscopic Photochromoscope," by Mr. F. E. Ives. "Messrs. Newton's Simple Method of Projecting Stereoscopic Pictures," by Mr. T. E. Freshwater. "Stellar Photographs taken without a Driving-clock," by Mr. J. Lunt.

Royal Institution of Great Britain, at 3 P.M. Professor Charles Stewart on "The External Covering of Plants and Animals: Its Structure and Functions."

Wednesday, February 26.

Brighton Junior Association of Pharmacy, Newburg Hall, at 9 P.M. Dr. F. J. Paley on "First Aid" in ambulance work.

Thursday, February 27.

Chemists' Assistants' Association, 103 Great Russell Street, W.C., at 8 30 P.M. Mr. R. H. Jones on "The Digestive Ferments of the Pancreas."

Glasgow and West of Scotland Pharmaceutical Association, 94 West Regent Street, at 9.15. Mr. John Black on "The Phosphates of Iron and Calcium in Pharmaceutical Syrups."

Royal Institution of Great Britain, at 3 P.M. Professor H. Marshall Ward on "Some Aspects of Modern Botany."

Society of Arts, Indian Section.—Imperial Institute, at 4 30 P.M. "The Tobacco Industry of India and the Far East," by Mr. C. Tripp, formerly of Sumatra.

Friday, February 28.

Pharmaceutical Society, 36 York Place, Edinburgh, at 8.30 P.M. Mr. W. L. Carrie in the chair. Papers:—"Notes from Some Old Edinburgh Infirmary Case-books," by Dr. A. Lockhart Gillespie, Medical Registrar, Royal Infirmary. "Spiritus Ætheris Compositus B.P.," by Dr. W. Inglis Clark and Mr. D. B. Dott. "Note on Papain," by Mr. D. B. Dott. "Note on Commercial Litmus," by Mr. D. Rainy Brown.

Royal Institution of Great Britain, at 9 P.M. Dr. John Murray on "Marine Organisms and the Conditions of Environment."

Saturday, February 29.

Royal Institution of Great Britain, at 3 P.M. Lord Rayleigh on "Light."